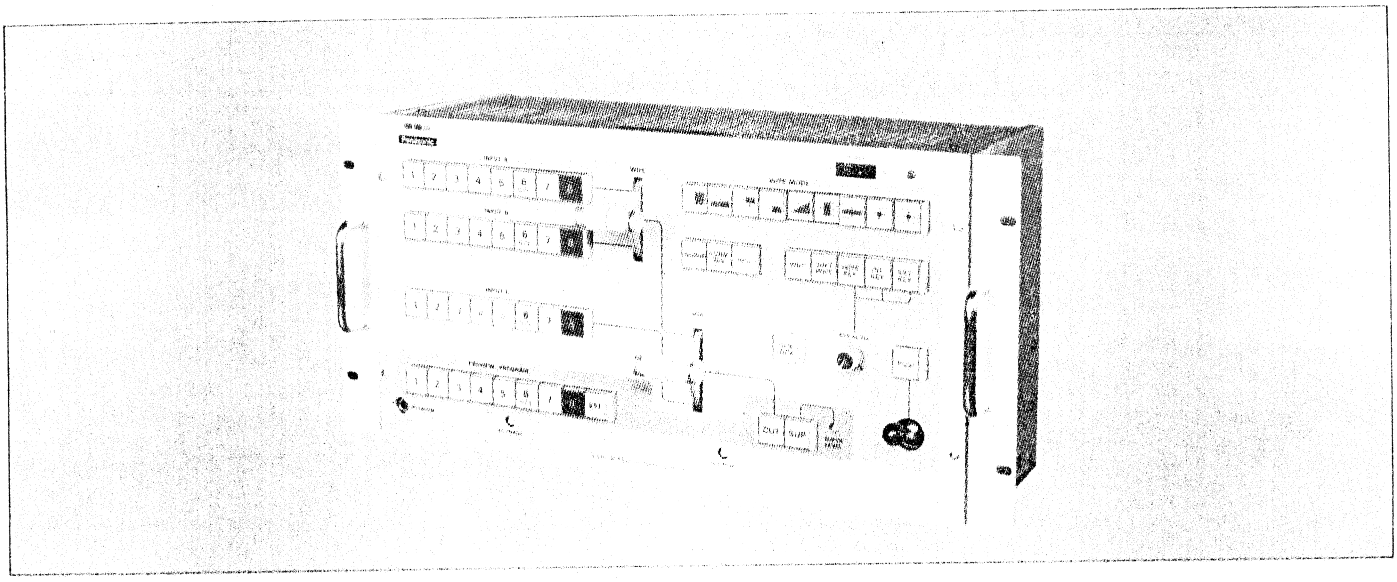
ORDER NO. AVD-8011-535

Service Manual

Special Effects Generator

WJ-5500N/WJ-5500E



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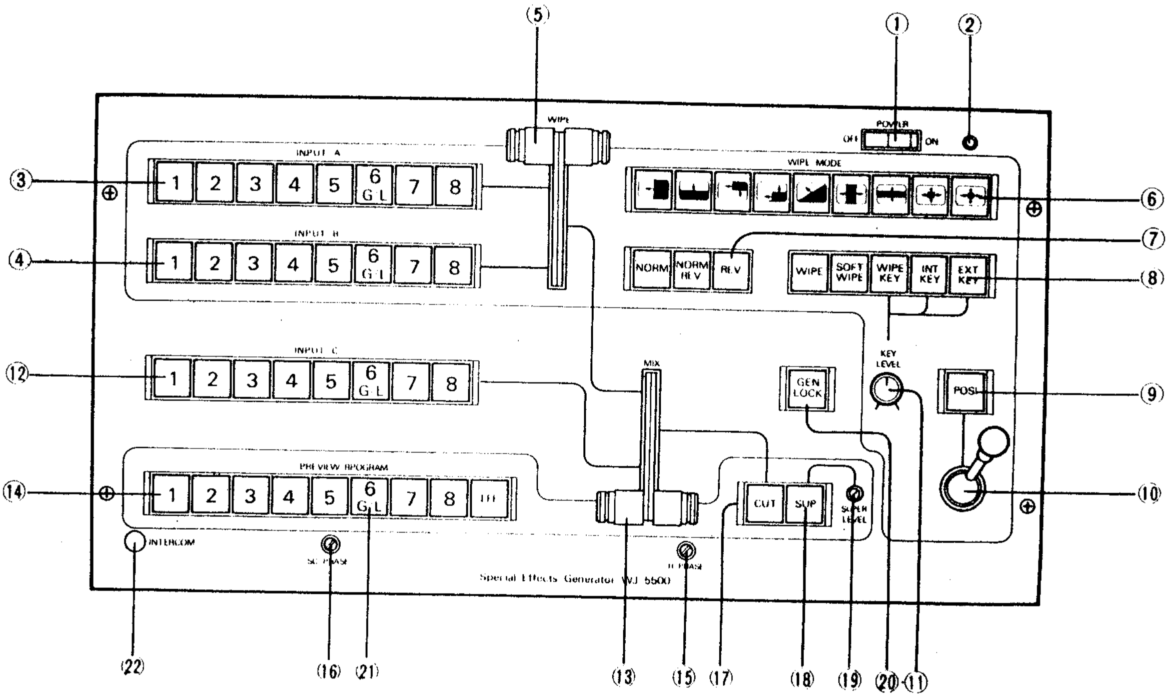
National/Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

MAJOR OPERATING CONTROLS

● FRONT VIEW



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②
WIPE
POWER
OFF
ON
INPUT A
WIPE MODE
1 2 3 4 5 6 G·L 7 8
INPUT B
NORM
NORM REV
REV
WIPE
SOFT WIPE
WIPE KEY
INT KEY
EXT KEY
INPUT C
KEY LEVEL
MIX
GEN LOCK
POSI
PREVIEW PROGRAM
EFF
CUT
SUP
SUPER LEVEL
INTERCOM
SC PHASE
H PHASE
Special Effects Generator WJ 5500
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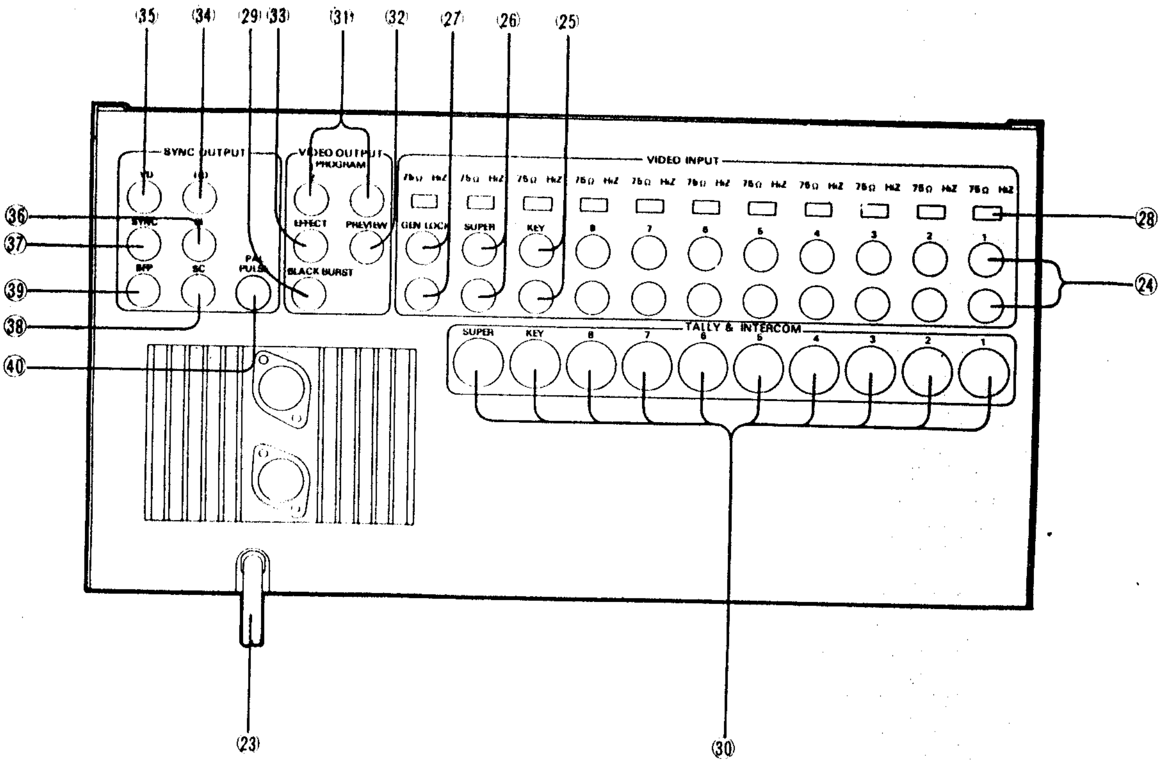
● REAR VIEW



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SYNC OUTPUT
VD
HD
SYNC
BL
BFP
SC
PAL PULSE
VIDEO OUTPUT
PROGRAM
EFFECT
PREVIEW
BLACK BURST
VIDEO INPUT
75Ω HiZ
GEN LOCK
SUPER
KEY
8
7
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3
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1
TALLY & INTERCOM
SUPER
KEY
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7
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CONTROLS AND THEIR FUNCTIONS

FRONT

① **ON/OFF Switch [POWER ON/OFF]**

② **Pilot Lamp**

③ **Input A Selector [INPUT A]**

Selects any one of 8 video sources for Input A.

CAUTION: Preview monitor will show the black & white picture when the black & white signal or no signal is selected on CH A (Input A).

It is recommended that the colour signal for CH A should be selected for colour preview monitor.

④ **Input B Selector [INPUT B]**

Select any one of 8 video sources for Input B.

⑤ **Wipe Levers for EFFECT [WIPE]**

Separate or locked split wipe controls.

⑥ **Wipe Mode Selector [WIPE MODE]**

Pushing any one of the nine wipe mode selector buttons, allows variable split pattern between cameras by moving Wipe Levers for EFFECT ⑤.

⑦ **Normal/Reverse Selector [NORM/NORM REV/REV]**

Three different modes, NORMAL/NORMAL-REVERSE/REVERSE, can be selected for the wipe effect.

⑧ **Function Selector [WIPE/SOFT WIPE/WIPE KEY/INPUT KEY/EXT KEY]**

Selects the type of special effect which is applied to the program bus.

⑨ **Positioner ON/OFF Switch [POSI]**

Permits wipe to start at other than normal position.

⑩ **Positioner Lever**

Moves start or wipe to other than normal position.

⑪ **Key Level Control [KEY LEVEL]**

Control for obtaining optimum keying.

⑫ **Input C Selector [INPUT C]**

Selects any one of 8 video sources for Input C.

⑬ **Mix Lever for MIX [MIX]**

Separate and locked, split fader controls.

⑭ **Preview/Program Selector [PREVIEW/PROGRAM]**

Cut ON/OFF Switch ⑰ **OFF:**

Permits the preview video (1 ~ 8, EFF) to be seen in the preview monitor, and the mixed effect video to be seen as a program (line out).

Cut ON/OFF Switch ⑰ **ON:**

Permits the preview video (1 ~ 8, EFF.) to be seen as a program (line out), and the mixed effect video to be seen in the preview monitor.

⑮ **Horizontal Phase Control [H PHASE]**

This recessed control is adjusted to match the horizontal phase between the "gen-lock in" signal and S.E.G. system signal (reference signal).

The variable range against the "gen-lock in" signal is −1.5μsec and +0.5μsec.

⑯ **SC Phase Control [SC PHASE]**

This recessed control is adjusted to match the color hues between the "gen-lock in" signal and S.E.G. system signal (reference signal). The variable range against the "gen-lock in" signal is more than 360°.

⑰ **Cut ON/OFF Switch [CUT]**

Reverse the preview and program buses when ON.

⑱ **Super ON/OFF Switch [SUP]**

Permits superimposing of images when ON.

⑲ **Super Level Control [SUPER LEVEL]**

Control for obtaining optimum superimposed image.

⑳ **Gen-Lock ON/OFF Switch [GEN LOCK]**

Gen-lock video input signal should be connected to the Video Input Connector for Gen-lock ㉗. When the gen-lock signal is connected, and this switch is pushed in, the lamp will light. It will stay off when the gen-lock signal is not connected.

㉑ **Gen-Lock Push Button [6 G/L]**

Gen-lock Switch ⑳ **ON:**

The video signal which is connected to the Video Input Connector for Gen-lock ㉗ will be selected by depressing the NO. 6 (G/L) button of input selector.

Gen-lock Switch ⑳ **OFF:**

The video signal which is connected to the No. 6 of Video Input Connector ㉔ will be selected by depressing the No. 6 (G/L) button of input selector.

㉒ **Intercom Jack [INTERCOM]**

For voice communications between cameras and WJ-5500N/E through RCU.

REAR

㉓ **Power Cord**

㉔ **Video Input Connector [VIDEO INPUT 1 ~ 8]**

The output of a camera control unit/remote control unit or camera should be connected to one of these two BNC connectors. If this signal is not looped through, the Video Termination Switch ㉘ should be set to 75Ω position.

㉕ **Video Input Connector for Key**
[VIDEO INPUT/KEY]

The output of the key camera should be connected to one of these two BNC connectors. If this signal is not looped through, the Video Termination Switch ㉘ should be set to 75Ω position.

㉖ **Video Input Connector for Superimpose**
[VIDEO INPUT/SUPER]

The output of the camera used for superimposing should be connected to one of these two BNC connectors If this signal is not looped through, the Video Termination Switch ㉘ should be set to 75Ω position.

㉗ **Video Input Connector for Gen-lock**
[VIDEO INPUT/GEN LOCK]

The output of a non-synchronous composite video source should be connected to one of these two BNC connectors. If this signal is not looped through, the Video Termination Switch ㉘ should be set to 75Ω position.

㉘ **Video Termination Switch**
[VIDEO INPUT 75Ω/Hi-Z]

When bridging or looping through, set this switch to Hi-Z position.
Set to 75Ω position otherwise.

㉙ **Black Burst Output Connector**

BNC type connector for Black Burst signal

㉚ **Tally Intercom Connector**
[TALLY INTERCOM]

The output of the camera control unit/remote control unit is introduced into this connector.

㉛ **Program Output Connector**
[VIDEO OUTPUT/PROGRAM 1,2]

There are two program outputs available, both using BNC type connectors.

㉜ **Preview Output Connector**
[VIDEO OUTPUT/PREVIEW]

BNC type connector for preview output.

CAUTION: Preview monitor will show the black & white picture when the black & white signal or no signal is selected on CH A (Input A).

It is recommended that the colour signal for CH A should be selected for colour preview monitor.

㉝ **Effect Output Connector**
[VIDEO OUTPUT/EFFECT]

BNC type connector for effects output.

㉞ **Horizontal Drive Output Connector**
[SYNC/OUTPUT/HD]

BNC type connector for HD signal.

㉟ **Vertical Drive Output Connector**
[SYNC OUTPUT/VD]

BNC type connector for VD signal.

㊱ **Blanking Output Connector**
[SYNC OUTPUT/BL]

BNC type connector for BL signal.

㊲ **Sync Output Connector**
[SYNC OUTPUT/SYNC]

BNC type connector for SYNC signal.

㊳ **Subcarrier Output Connector**
[SYNC OUTPUT/SC]

BNC type connector for SC signal.

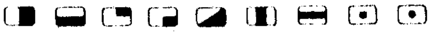
㊴ **Burst Flag Pulse Output Connector**
[SYNC OUTPUT/BFP]

BNC type connector for BFP pulse.

㊵ **PAL Pulse Output Connector**
[SYNC OUTPUT/PAL PULSE]

BNC type connector for PAL pulse.

SPECIFICATIONS

Video input:	1.0Vp-p composite or 0.7Vp-p non-composite/75 ohms or Hi-Z looping through x 8 (BNC connectors)
Key Video Input:	1.0Vp-p composite or 0.7Vp-p non-composite/75 ohms Hi-Z looping through x 1 (BNC connector)
Super Video Input:	1.0Vp-p composite or 0.7Vp-p non-composite/75 ohms or Hi-Z looping through x 1 (BNC connector)
Gen-lock Video Input:	1.0Vp-p composite only/75 ohms or Hi-Z looping through x 1 (BNC connector)
Video Output (Program):	1.0Vp-p composite/75 ohms x 2 (BNC connectors)
Preview Output:	1.0Vp-p composite/75 ohms x 1 (BNC connector)
Effect Output:	1.0Vp-p composite/75 ohms x 1 (BNC connector)
Sync Output:	HD, VD, BL, SYNC, BFP: 4.0Vp-p/75 ohms, CS: 2.0Vp-p/75 ohms, PAL PULSE
Black Burst Output:	0 set up Black signal (Composite Sync, Burst: 0.3Vp-p/75 ohms) x 1 (BNC connector)
SC Phase Control:	More than 360° against gen-lock in signal
H Phase Control:	-1.5μ sec and +0.5μ sec. against gen-lock signal
Switch:	Illuminated, non-locking (input buses, preview/program buses) and lock-release type
Switching:	Vertical interval switching (input buses, preview/program buses)
Frequency Response:	10MHz ±1.5dB
Gain:	Unity
Signal to Noise Ratio:	More than 60dB
Differential Gain:	Less than 2.0% at 10~90% APL
Differential Phase:	Less than 2.0° at 10~90% APL
Crosstalk:	Better than 42dB at 4.43MHz
Functions:	
Input Bus:	Input A, B and C (camera 1~5, 6 or gen-lock video, 7, 8 or black scene)
Preview/Program Bus:	Camera 1~5, 6 or gen-lock, 7, 8 or black scene, Effect
Effects:	
Mixing:	Yes
Downsteram Mixing:	Yes
Fading:	Yes
Dissolves:	Yes
Superimposing:	Yes
Wipes:	Normal, normal-reverse, or reserve wipe modes; sharp or soft edges; 9 wipe patterns with positioning 
Wipe key:	Yes
Internal Key:	Yes
External Key:	Yes
Gen-lock:	Yes
Tally Light Control:	10 (camera 1~8, key camera, super camera)
Intercom:	9 (camera 1~8, self)
Power Source:	WJ-5500N/A : 240V AC, 50 Hz WJ-5500N : 220V or 240V AC, 50 Hz WJ-5500E/B : 240V AC, 50 Hz WJ-5500E/G : 220V AC, 50 Hz
Power Consumption:	49W
Ambient Temperature:	14°F ~ 122°F (-10°C ~ +50°C)
Ambient Humidity:	Less than 90%
Dimensions:	480 (W) x 222 (H) x 180 (D) mm [19" (W) x 8-3/4" (H) x 7-1/16" (D)]
Weight:	20.7 lbs, 9.4kg

ADJUSTMENTS

1. TEST EQUIPMENTS

- Video signal generator with built-in color bar, stairstep signal, sweep signals and convergence signal.
- PAL vectorscope capable of measuring Differential gain and Differential phase. (Tektronix R521A or equivalent)
- PAL waveform monitor. (Tektronix 528 or equivalent) If there is not, may use oscilloscope as a substitute.
- Underscaned color monitor (or B/W monitor).
- Frequency counter. (Frequency range: 5MHz)
- Dual-trace oscilloscope. (Bandwidth more than 30MHz, delayed function)
- Extender board. (Part No. YWJ5500ZK13)
- 75Ω termination plug.

2. CONNECTION FOR ADJUSTMENT

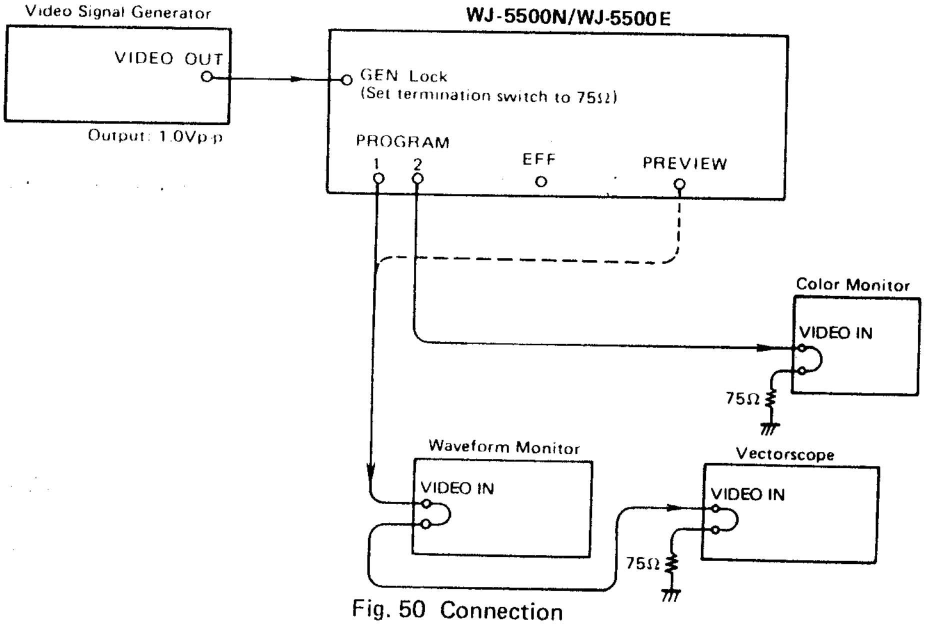

Video Signal Generator
VIDEO OUT
Output: 1.0Vp-p
WJ-5500N/WJ-5500E
GEN Lock
(Set termination switch to 75Ω)
PROGRAM
1
2
EFF
PREVIEW
Color Monitor
VIDEO IN
75Ω
Waveform Monitor
VIDEO IN
Vectorscope
VIDEO IN
75Ω

Fig. 50 Connection

3. HOW TO USE OPTIONAL EXTENDER BOARD (YWJ5500ZK13)

■ **The Optional extender board (YWJ5500ZK13) is required for adjusting WJ-5500N/E.**

- Separate the WIPE and MIX levers and remove their knobs by removing fixing screws.
- Remove the key level control knob.
- Remove four front panel fixing screws and remove the panel and plastic sheet.
- Disconnect a circuit board (to be adjusted) by pulling it forward.
- Connect the optional extender board to the connector for circuit board and the circuit board to the optional extender board.

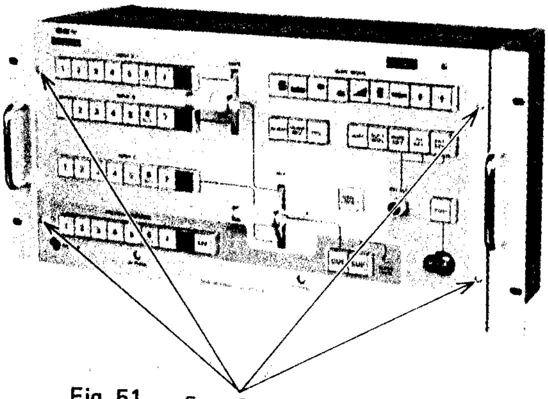

Four Screws

Fig. 51

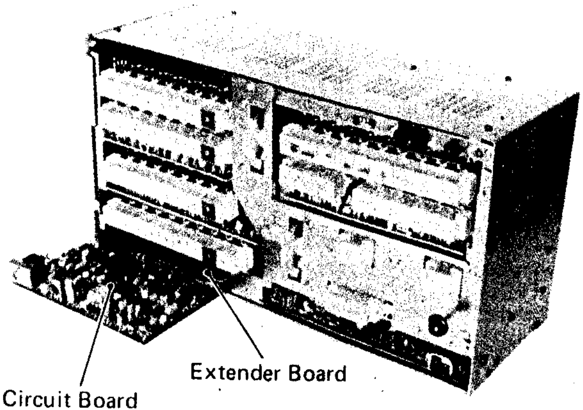
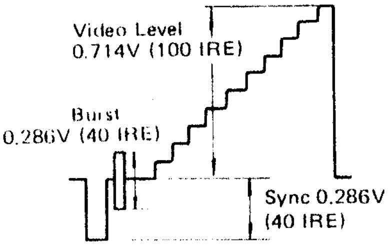
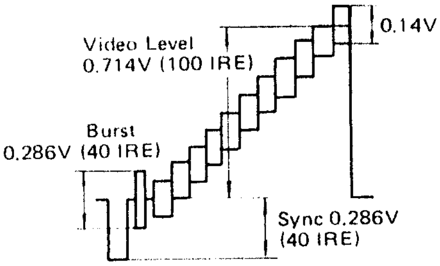
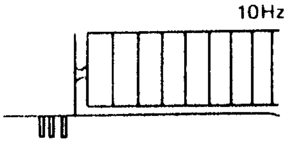
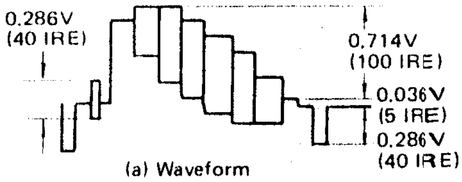
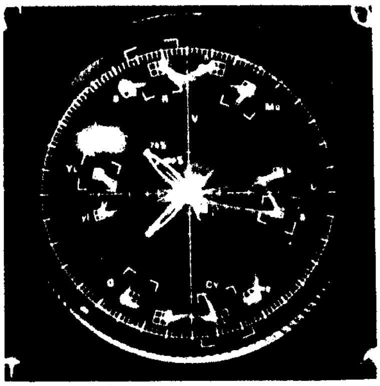

Circuit Board
Extender Board

Fig. 52

- Select one of the following signals for adjustments. (Fig. 53)

Adjustment	Test Signal	Specified Level
Gain	Stairstep Signal with Burst	 Video Level 0.714V (100 IRE) Burst 0.286V (40 IRE) Sync 0.286V (40 IRE)
DG, DP	Modulated Stairstep Signal	 0.14V Video Level 0.714V (100 IRE) Burst 0.286V (40 IRE) Sync 0.286V (40 IRE)
Frequency Response	Sweep Signal	
Phase	Color Bar Signal	 0.286V (40 IRE) 0.714V (100 IRE) 0.036V (5 IRE) 0.286V (40 IRE) (a) Waveform  (b) Vectorscope

4. ADJUSTMENT

SUBCARRIER CIRCUIT BOARD (YWJ5500EZK08)

- Refer to page 9 for test points and adjusting controls.

a) Subcarrier Gain Adjustment

Test points:	**TP3** **SC Output Connector**
Adjusts:	**VR3 (SC LIMITER)** **VR5 (SC GAIN)**

- Set the GEN-LOCK switch to the OFF position.
- Connect the oscilloscope to TP3.
- Adjust VR3 so that the SC (pulse) is 2 Vp-p.
- Connect the oscilloscope to the terminated (75Ω) SC output connector.
- Adjust VR5 so that the SC (sine wave) is 2 Vp-p.

SYNC CIRCUIT BOARD (YWJ5500EZK09)

- Refer to page 9 for test points and adjusting controls.

a) Subcarrier Frequency Adjustment

Test points:	**SC Output Connector**
Adjust:	**VC2 (4.43MHz ADJ)**

- Set the GEN-LOCK switch to the OFF position.
- Connect the frequency counter to the SC output connector.
- Adjust VC2 for 4.433619MHz ±3Hz.

b) Phase Lock Adjustment

Test points:	**TP5** **TP6** **TP8**
Adjust:	**VC1 (PHASE LOCK)**

- Keep setting the GEN-LOCK switch to the OFF position.
- Connect the digital voltmeter or oscilloscope to TP5.
- Adjust VC1 so that the voltage at TP5 is 6V DC.
- Confirm that the vertical pulse at TP6 is locked to the vertical drive (VD) pulse at TP8.

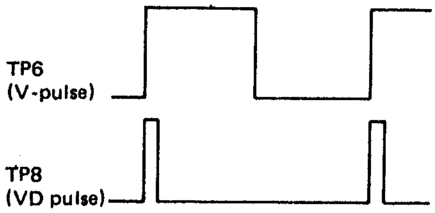


Fig. 54

c) Pulse Gain Adjustment

Test Point:	**HD Output Connector**
Adjust:	**VR4 (PULSE GAIN)**

- Connect the oscilloscope to the terminated (75Ω) HD output connector.
- Adjust VR4 for 4.0 Vp-p.

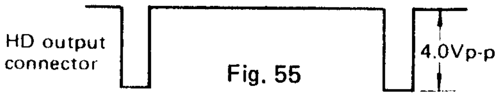


Fig. 55

d) Gen-Lock VCO Adjustment

Test Point:	**Pin 2 of IC9**
Adjust:	**VC3 (VCO SET)**

- Select the stairstep signal with burst at the video signal generator.
- Set the GEN-LOCK switch to the ON position.
- Connect the digital voltmeter or oscilloscope to pin 2 of IC9.
- Adjust VC3 for 4V DC.

e) V. Reset Pulse Adjustment

Test Points:	**GEN-LOCK Video Input Connector** **TP2** **TP3**
Adjusts:	**VR1 (BURST DETECT)** **VR2 (V. RESET PHASE)**

- Keep setting the GEN-LOCK switch to the ON position.
- Connect the oscilloscope to the GEN-LOCK video input connector and TP2.
- Trigger the oscilloscope at V. rate. (Use TP7 or pin 1 of IC3.)
- Use the delayed sweep mode to observe the first burst signal portion in the third field of gen-lock video signal.

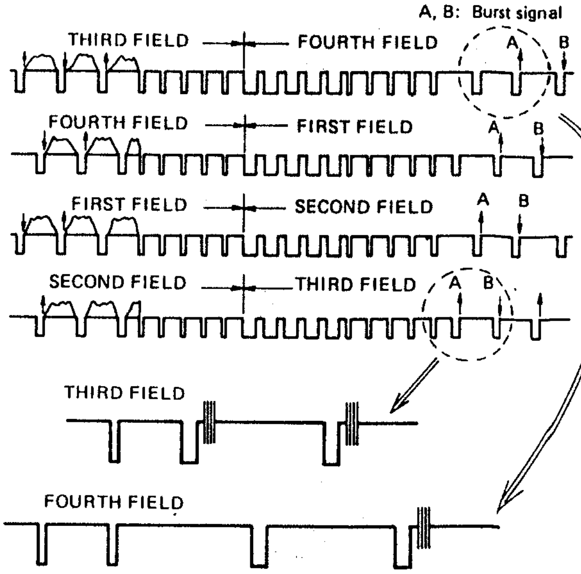


Fig. 56

- Adjust VR1 so that the decay timing of third field detection pulse positions as shown below.

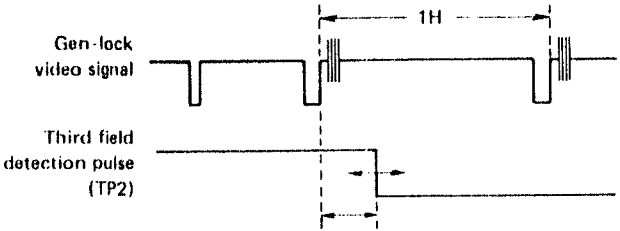


Fig. 57

- Remove the probe from TP2 and connect it to TP3.
- Use the delay sweep mode to observe the first burst signal portion in the fourth field of gen-lock video signal. (Refer to Fig. 56.)
- Adjust VR2 so that the V. reset pulse at TP3 positions as shown below.

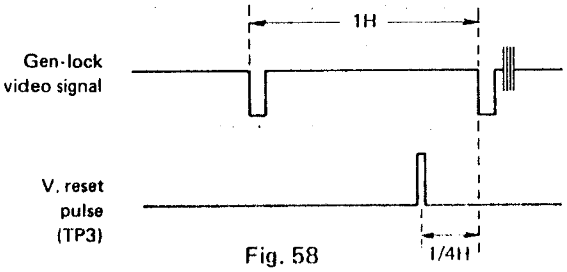


Fig. 58

f) H. Phase Adjustment

Test points:	**GEN-LOCK Video Input Connector** **SYNC Output Connector**
Adjust:	**VR3 (G/L H. PHASE)**

- Keep settting the GEN-LOCK switch to the ON position.
- Connect the oscilloscope to the GEN-LOCK video input connector and the SYNC output connector.
- Trigger the oscilloscope at H. rate.
- Confirm that the gen-lock sync signal at the GEN-LOCK video input connector leads by more than 0.5μsec and lags more than 1.5μsec the sync signal at the SYNC output connector as VR3 is turned through its range.

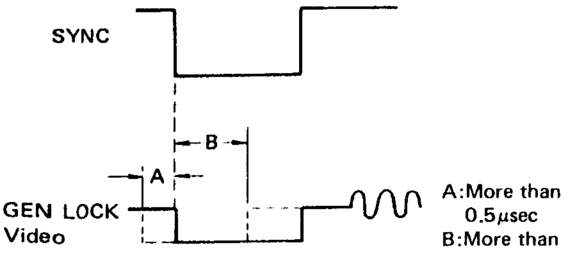


Fig. 59

- After confirming the above step, adjust VR3 until the leading edges of both signals are coincident.

SUBCARRIER CIRCUIT BOARD (YWJ5500EZK08)

- Refer to page 9 for test points and adjusting controls.

b) Subcarrier Lock Adjustment

Test points:	**Subcarrier Output of Video Signal Generator** **TP1**
Adjust:	**VR1 (G/L SC LOCK)**

- Set the GEN-LOCK switch to the ON.
- Connect the oscilloscope to TP1 and the subcarrier output of video signal generator which supplies the gen-lock signal.
- Trigger the oscilloscope at SC rate. (Use SC output of video signal generator.)
- Adjust VR1 until the SC signal at TP1 is locked and its amplitude is maximum.

c) Subcarrier Phase Confirmation

Test points:	**Subcarrier Output of Video Signal Generator** **TP2**
Adjust:	**VR2 (G/L SC PHASE)**

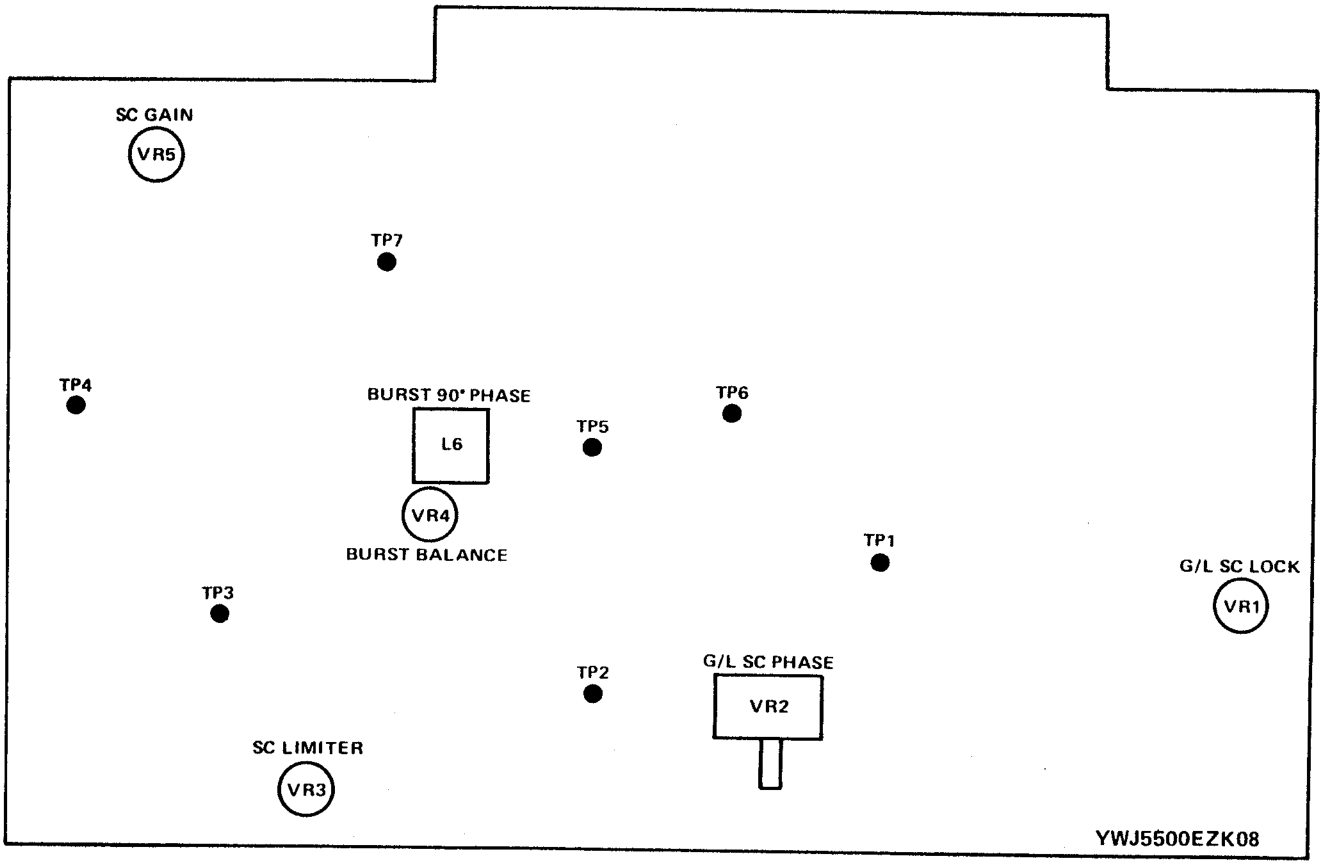
- Keep setting the GEN-LOCK switch to the ON position.
- Connect the Oscilloscope to TP2 and the subcarrier output of video signal generator.
- Trigger the oscilloscope at SC rate. (Use SC output of video signal generator.)
- Confirm that the subcarrier at TP2 shifts more than one cycle (360°) as VR2 is turned through its range.
- After confirming the above step, adjust VR2 until both subcarrier signals match in phase.

d) Burst Phase and Balance Adjustment

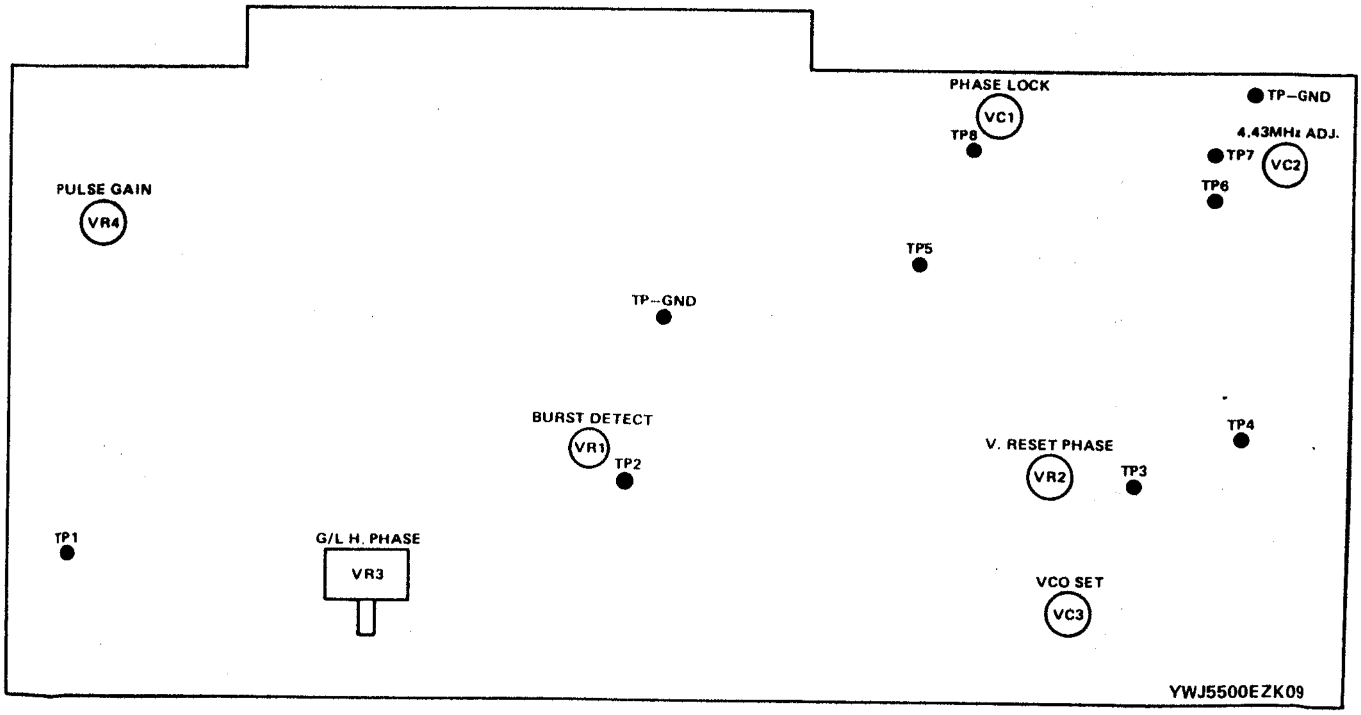
Observe:	**Vectorscope**
Adjusts:	**L6 (BURST 90° PHASE)** **VR4 (BURST BALANCE)**

- Reset the GEN-LOCK switch to the OFF position.
- Connect the BLACK BURST output connector to the vectorscope.
- While observing the burst vectors on the vectorscope, adjust L6 and VR4 alternately until the burst vectors position on the burst axes and their amplitude becomes equal on the vectorscope.

LOCATION OF TEST POINTS AND CONTROLS

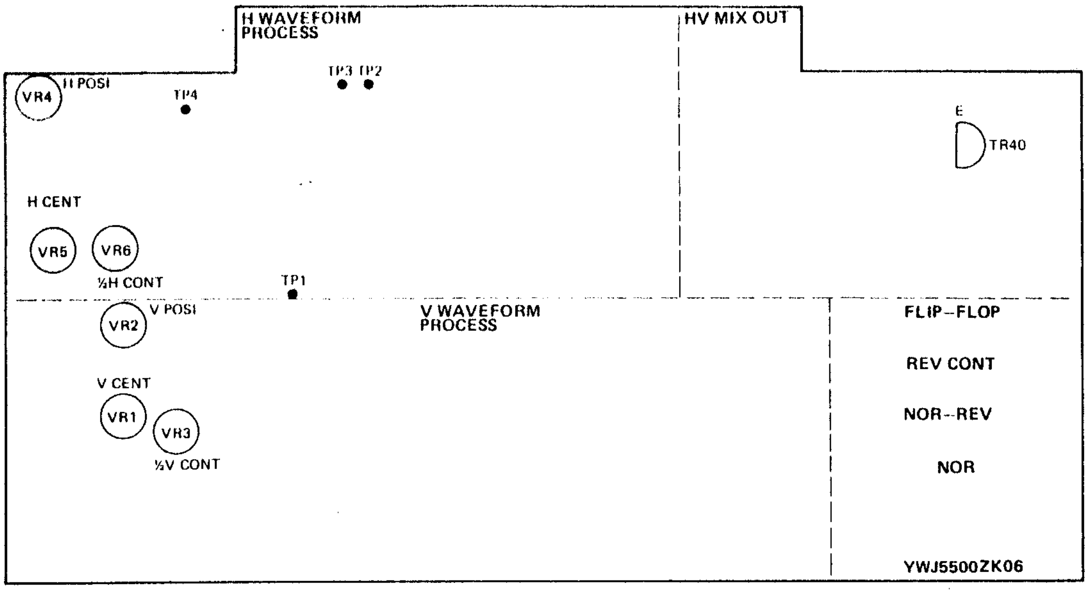

SC GAIN
VR5
TP7
TP4
BURST 90° PHASE
L6
TP5
TP6
VR4
BURST BALANCE
TP1
G/L SC LOCK
VR1
TP3
TP2
G/L SC PHASE
VR2
SC LIMITER
VR3
YWJ5500EZK08

SUBCARRIER CIRCUIT BOARD (YWJ5500EZK08)

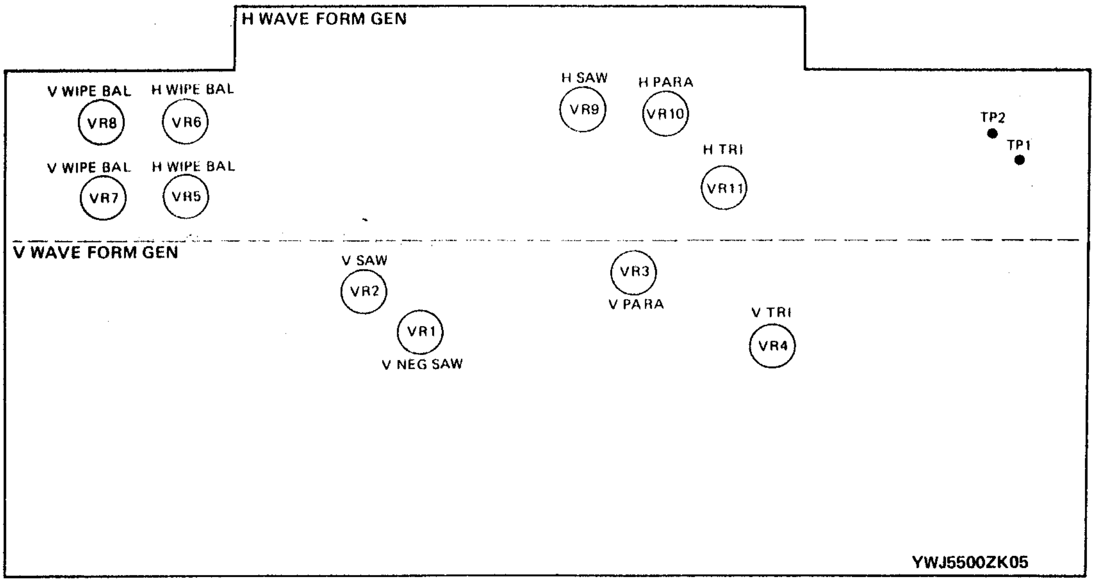

PHASE LOCK
VC1
TP8
TP–GND
4.43MHz ADJ.
TP7
VC2
TP6
PULSE GAIN
VR4
TP5
TP–GND
BURST DETECT
VR1
TP2
V. RESET PHASE
VR2
TP3
TP4
TP1
G/L H. PHASE
VR3
VCO SET
VC3
YWJ5500EZK09

SYNC CIRCUIT BOARD (YWJ5500EZK09)

LOCATION OF TEST POINTS AND CONTROLS


H WAVEFORM PROCESS
HV MIX OUT
VR4 H POSI
TP4
TP3 TP2
E
TR40
H CENT
VR5
VR6
½H CONT
TP1
VR2 V POSI
V WAVEFORM PROCESS
FLIP–FLOP
REV CONT
NOR–REV
NOR
V CENT
VR1
VR3
½V CONT
YWJ5500ZK06

WAVEFORM PROCESSOR/POSITIONER CIRCUIT BOARD (YWJ5500ZK06)


H WAVE FORM GEN
V WIPE BAL
VR8
H WIPE BAL
VR6
H SAW
VR9
H PARA
VR10
TP2
TP1
H TRI
VR11
V WIPE BAL
VR7
H WIPE BAL
VR5
V WAVE FORM GEN
V SAW
VR2
VR3
V PARA
VR1
V NEG SAW
V TRI
VR4
YWJ5500ZK05

WAVEFORM GENERATOR CIRCUIT BOARD (YWJ5500ZK05)

WAVEFORM PROCESSOR/POSITIONER CIRCUIT BOARD (YWJ5500ZK06)

- Refer to page 10 for test points and adjusting controls.
- Set the GEN-LOCK switch to ON.

a) H. Centering Adjustment

Test points:	**TP3** **HD Output Connector**
Adjust:	**VR5 (H. CENT)**

- Connect the oscilloscope to TP3 and HD output connector.
- Adjust VR5 so that signal phase is as shown below. [Be sure Positioner (POSI) switch is turned OFF.]

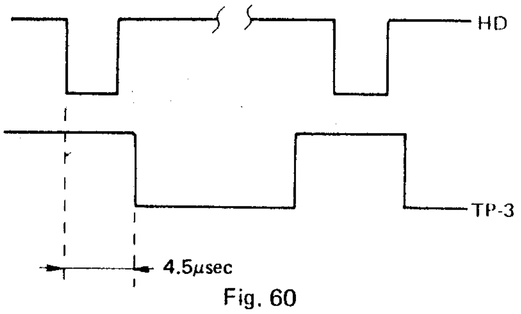


Fig. 60

b) 1/2H Cont. Adjustment

Test point:	**TP4**
Adjust:	**VR6 (1/2H CONT.)**

- Connect the oscilloscope to TP4.
- Adjust VR6 so that A = B = 64/2μsec.

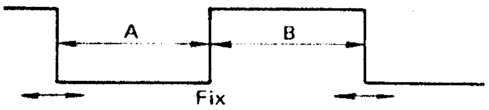
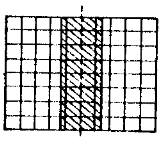


Fig. 61

Confirmation

- Supply convergence signal to GEN LOCK input connector
- Select No. 6 (G/L) on input A and No. 8 (No. Input) on input B.
- Select NORM WIPE mode on the function selector.
- Select the wipe mode ▮
- If the vertical line is not located in the center, readjust VR6.



Center of horizontal

Fig. 62

c) V. Centering Adjustment

Test points:	**TP1** **VD Output Connector**
Adjust:	**VR1 (V. CENT)**

- Connect the oscilloscope to TP1 and VD output connector.
- Adjust VR1 so that signal phase is as shown below. (Be sure Positioner (POSI) switch is turned OFF.)

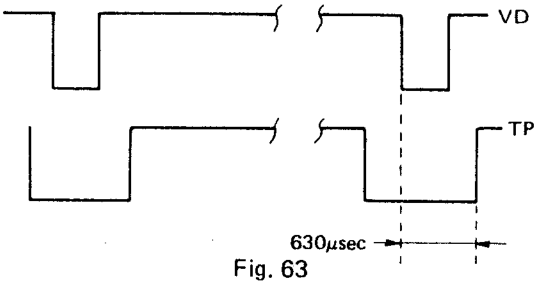


Fig. 63

d) 1/2V Cont. Adjustment

Test point:	**TP2**
Adjust:	**VR3 (1/2V CONT.)**

- Connect the oscilloscope to TP2
- Adjust VR3 so that A = B = 10 msec.

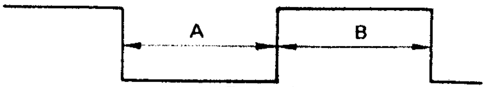


Fig. 64

Confirmation

- Supply convergence signal to GEN LOCK input connector.
- Select No. 6 (G/L) on input A and No. 8 (No. Input) on input B.
- Select NORM WIPE mode on the function selector.
- Select the wipe mode ▬
- If the horizontal line is not located in the center, readjust VR3.

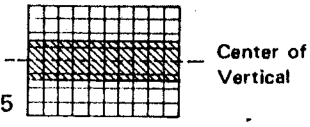


Fig. 65

- Select the wipe mode ●
- Confirm that the center of the circle is located in the center of the screen. It is not, readjust VR1 (V. CENT) and VR5 (H. CENT)

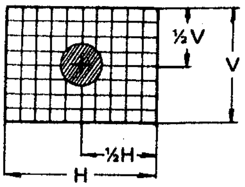


Fig. 66

e) H.V. Positioner Adjustment

Observe:	**Underscand color (or B/W) monitor**
Adjusts:	**VR2 (V. POSITION)** **VR4 (H. POSITION)**

- Connect the underscaned color (or B/W) monitor to EFFECT OUTPUT connector.
- Supply convergence signal to GEN LOCK input connector.
- Select No. 6 (G/L) on input A and No. 8 (No. Input) on input B.
- Select NORM. WIPE on the function selector.
- Select the wipe mode .
- Set the Positioner (POSI) switch to ON.
- Adjust VR2 so that the circle moves symmetrically by moving positioner lever straight up and down.
- Adjust VR4 so that the circle moves symmetrically by moving positioner lever right and left.

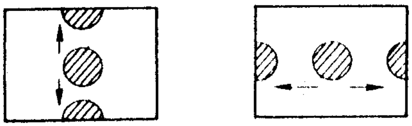


Fig. 67

WAVEFORM GENERATOR CIRCUIT BOARD (YWJ5500ZK05)

- Refer to page 10 for test points and adjusting controls.

a) H. Sawtooth Adjustment.

Test point:	**TP2**
Adjust:	**VR9 (H. SAWTOOTH)**

- Select WIPE mode on the function selector.
- Select the wipe mode .
- Adjust VR9 so that H. sawtooth amplitude becomes 1.2Vp-p.

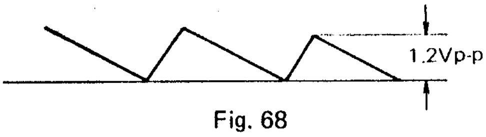


Fig. 68

b) V. Sawtooth Adjustment

Test point:	**TP1**
Adjust:	**VR2 (V. SAWTOOTH)**

- Select the wipe mode
- Adjust VR2 so that V. sawtooth amplitude becomes 1.2Vp-p.

c) V. Neg. Sawtooth Adjustment

Test point:	**TP1**
Adjust:	**VR1 (V. NEG. SAWTOOTH)**

- Select the wipe mode .
- Adjust VR1 so that V. negative sawtooth amplitude becomes 1.2Vp-p.

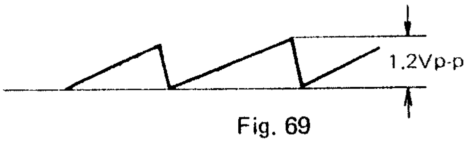


Fig. 69

d) H. Triangle Adjustment

Test point:	**TP2**
Adjust:	**VR11 (H. TRIANGLE)**

- Select the wipe mode
- Adjust VR11 so that H. triangle amplitude becomes 1.2Vp-p.

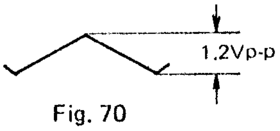


Fig. 70

e) V. Triangle Adjustment

Test point:	**TP1**
Adjust:	**VR4 (V. TRIANGLE)**

- Select the wipe mode
- Adjust VR4 so that V. triangle amplitude becomes 1.2Vp-p.

Confirmation

- Supply convergence signal to GEN LOCK input connector.
- Select No. 6 (G/L) on input A and No. 8 (No. Input) on input B.
- Select NORM. WIPE on the function selector.
- Select the wipe mode .
- Move the wipe lever up and down.
- Confirm that the screen disappear simultaneous both vertically and horizontally.

  If it is not readust VR4.

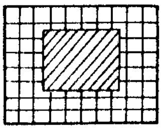


Fig. 71

f) H. Parabola Adjustment

Test point:	**TP2**
Adjust:	**VR10 (H. PARABOLA)**

- Select the wipe mode ◈ .
- Adjust VR10 so that H. parabola amplitude becomes 1.0Vp-p.

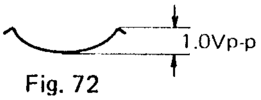


Fig. 72

g) V. Parabola Adjustment

Test point:	**TP1**
Adjust:	**VR3 (V. PARABOLA)**

- Select the wipe mode ◈ .
- Adjust VR3 so that V. parabola amplitude becomes 1.0Vp-p.

Confirmation

- Supply convergence signal to GEN LOCK input connector.
- Select No. 6 (G/L) on input A and No. 8 (No. Input) on input B.
- Select NORM. WIPE on the function selector.
- Select the wipe mode ◈ .
- Confirm that the center circle is round. If it is not, readjust VR3.

h) Wipe Balance Adjustment

Test point:	**Emitter of TR40 on WAVEFORM PROCESSOR/POSITIONER CIRCUIT BOARD, ZK06.**
Adjusts:	**VR5, VR6 (H. WIPE BALANCE)** **VR7, VR8 (V. WIPE BALANCE)**

- Connect the oscilloscope to the emitter of TR40 on WAVEFORM PROCESSOR/POSITION CIRCUIT BOARD, ZK06.
- Set the WIPE lever to center position.
- Select the wipe mode ◨ .
- Adjust VR5 and VR6 so that A = B as shown below.
- Select the wipe mode ⬓ .
- Adjust VR7 and VR8 so that A = B as shown below.

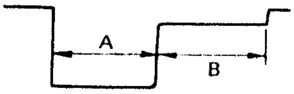


Fig. 73

- Supply convergence signal to GEN LOCK input connector.
- Select No. 6 (G/L) on input A and No. 8 (No. Input) on input B.
- Select NORM. WIPE on the function selector.
- Select the wipe mode ◨ .
- Adjust VR5 and VR6 so that the wipe pattern reaches the left edge on the monitor, when the WIPE lever moves from wipe-A toward wipe-B.
- Confirm that the wipe pattern reaches the left edge on the monitor, when the WIPE lever moves from wipe-B toward wipe-A. If it is not, readjust VR5 and VR6.
- Select the wipe mode ⬓ .
- Adjust VR7 and VR8 so that the wipe pattern reaches the uppwer edge on the monitor, when the WIPE lever moves from wipe-A toward wipe-B.
- Confrim that the wipe pattern reaches the upper edge on the monitor, when the WIPE lever moves from wipe-B toward wipe-A. If it is not, readjust VR7 and VR8.
- Select the wipe mode ◲ .
- Confirm that the wipe pattern reaches the upper edge when it reaches the left edge (corner coincidence), when the WIPE lever moves from wipe-A toward wipe-B. If it is not, readjust VR7 and VR8.

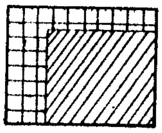


Fig. 74

WIPE, KEY, EFFECT OUTPUT CIRCUIT BOARD (YWJ5500EZK02)

- Refer to page 19 for test points and adjusting controls.
- Connect the waveform monitor to EFFECT output connector.
- Supply stairstep signal to GEN LOCK input connector.
- Select No. 6 (G/L) on A and B inputs.
- Set the GEN LOCK switch to ON.

a) Wipe DC Bias Adjustment

Test point:	**Emitter of TR4**
Adjust:	**VR1 (WIPE DC BIAS)**

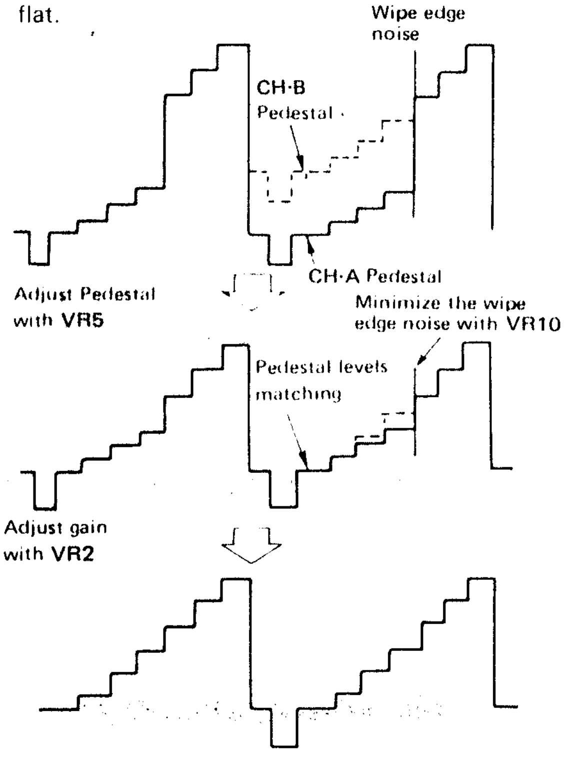
- Connect the oscilloscope to the emitter of TR4.
- Adjust VR1 so that the voltage becomes 7.0V DC.

b) Effect Gain Adjustment

Observe:	**Waveform monitor**
Adjusts:	**VR2 (B-ch GAIN)** **VR5 (B-ch PED)** **VR10 (WIPE EDGE COMP.)**

- Select WIPE on the function selector.
- Set the WIPE lever to Center position.
- Select the wipe mode ⬓ .
- Adjust VR2 and VR5 so that the signals matches both pedestal and gain.
- Select the wipe mode ◨ .
- Adjust VR10 so that the wipe edge noise becomes minimum.

  If there is level deviation, readjust VR5 to make it flat.


Wipe edge noise
CH-B Pedestal
CH-A Pedestal
Adjust Pedestal with VR5
Minimize the wipe edge noise with VR10
Pedestal levels matching
Adjust gain with VR2

Pedestal and gain matching

Fig. 75

c) Sync Separation Adjustment

Test point:	**TP1**
Adjust:	**VR9 (SYNC SEPARATION)**

- Connect the oscilloscope to TP1.
- Select No. 6 (G/L) on A and B inputs.
- Adjust VR9 so that only the sync signal comes out on the oscilloscope.

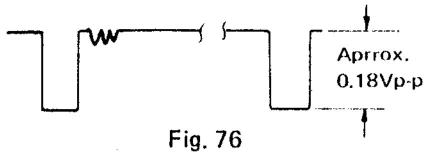

Aprrox.
0.18Vp-p

Fig. 76

d) Effect Out DC Balance Adjustment

Test point:	**TP5**
Adjust:	**VR8 (EFF. DC BALANCE)**

- Connect the oscilloscope to TP5.
- Select No. 8 (No. Input) on A and B inputs.
- Set the WIPE lever to Upper position.
- Adjust VR8 so that DC level becomes 0V.

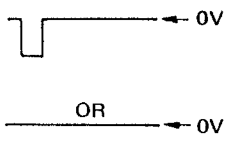


Fig. 77

PREVIEW OUT CIRCUIT

- Refer to page 18 and 19 for test points and adjusting controls.
- Connect the waveform monitor and vectorscope to PREVIEW OUTPUT connector.
- Supply stairstep signal to GEN-LOCK input.
- Select No. 6 (G/L) on input A, B, C and PREVIEW/PROGRAM selector.
- Set the GEN-LOCK switch to ON.

a) DC Balance Adjustment (PREVIEW/PROGRAM OUTPUT CIRCUIT BOARD, EZK07)

Test point:	**TP2**
Adjust:	**VR3 (PREVIEW DC BALANCE)**

- Select No. 8 (No Input) on PREVIEW/PROGRAM selector.
- Set the CUT switch to OFF.
- Adjust VR3 so that DC level becomes 0V.

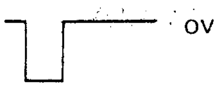


Fig. 78

b) DC 6V, 4V Adjustment (MIX, CUT CONTROL CIRCUIT, EZK03)

Test points:	**TP2** **TP3**
Adjusts:	**VR6 (6V ADJ.)** **VR7 (4V ADJ.)**

- Set the CUT switch to ON.
- Adjust VR6 so that DC voltage at TP2 becomes 6.0V.
- Adjust VR7 so that DC voltage at TP3 becomes 4.0V.

c) Gain and DG, DP Adjustment (PREVIEW/PROGRAM CIRCUIT BOARD, EZK07)

Observe:	**Waveform monitor** **Vectorscope**
Adjusts:	**VR1 (PREVIEW GAIN)** **VR2 (PREVIEW DG/DP)**

- Select No. 8 on PREVIEW PROGRAM selector.
- Set the CUT switch to OFF.
- Adjust VR1 so that the sync signal becomes 40 IRE (0.286Vp-p) on the waveform monitor.

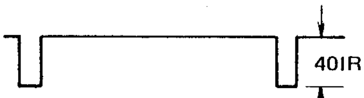


Fig. 79

- Select No.6 (G/L) on PREVIEW/PROGRAM selector.
- Select modulated stairstep signal of the video signal generator.
- Adjust VR2 so that DG becomes minimum on the vectorscope.

d) Gain and DG, DP Adjustment (MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

Observe:	**Waveform monitor** **Vectorscope**
Adjusts:	**VR12 (PREVIEW-ch DG/DP)** **VR17 (PREVIEW-ch GAIN)**

- Select stairstep signal of the video signal generator.
- Select No. 6 (G/L) on PREVIEW/PROGRAM selector.
- Adjust VR17 so that video signal becomes 100 IRE (0.714Vp-p) on he waveform monitor.
- Select modulated stairstep signal of the video signal generator.
- Adjust VR12 so that DG becomes minimum on the vectorscope.

e) EFF-ch GAIN and DG. DP Adjustment (WIPE, KEY, EFFECT OUTPUT CIRCUIT BOARD, EZK02)

Observe:	**Waveform monitor** **Vectorscope**
Adjusts:	**VR3 (EFF. 1 GAIN)** **VR4 (EFF. 1 DG/DP)**

- Select stairstep signal of the video signal generator.
- Select No. 6 (G/L) on input A and B.
- Select EFF. on PREVIEW/PROGRAM selector.
- Adjust VR3 so that video signal becomes 100 IRE (0.714Vp-p) on the waveform monitor.
- Select modulated stairstep signal of the video signal generator.
- Adjust VR4 so that DG becomes minimum on the vectorscope.

f) EFFECT GAIN and DG, DP Adjustment (WIPE, KEY, EFFECT OUTPUT CIRCUIT BOARD, EZK02)

Observe:	**Waveform monitor** **Vectorscope**
Adjusts:	**VR6 (EFF. 2 GAIN)** **VR7 (EFF. 2 DG/DP)**

- Connect the waveform monitor and vectorscope to EFFECT OUTPUT connector.
- Select stairstep signal of the video signal generator.
- Adjust VR6 so that video signal becomes 100 IRE (0.714Vp-p) on the waveform monitor.
- Select modulated stairstep signal of the video signal generator.
- Adjust VR7 so that DG becomes minimum on the vectorscope.
- Reconnect the waveform monitor and vectorscope to PREVIEW OUTPUT connector.

g) MIX GAIN and DG, DP Adjustment (MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

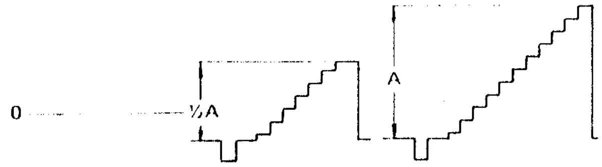
Observe:	**Waveform monitor** **Vectorscope**
Adjusts:	**VR2 (C-ch GAIN)** **VR3 (MIX GAIN)** **VR5 (C-ch DG/DP)** **VR16 (MIX DG/DP)**

- Select No. 6 (G/L) on input A, B and PREVIEW/PROGRAM selector.
- Select No. 8 (No. Input) on input C.
- Set the MIX lever and WIPE lever to upper position.
- Adjust VR3 so that output signal level does not change on the waveform monitor when switching the CUT switch ON and OFF.
- Set the CUT switch to ON.
- Adjust VR16 so that DG becomes minimum on the vectorscope.
- Confirm that DC level difference of video signal at TP5 is less than 0.2V when switching the CUT switch ON and OFF.
- Select stairstep signal of the video signal generator.
- Select No. 6 (G/L) on input C.
- Set the MIX lever to lower position.
- Set the CUT switch to ON.
- Adjust VR2 so that video signal becomes 100 IRE (0.714Vp-p) on the waveform monitor.
- Select modulated stairstep signal of the video signal generator.
- Adjust VR5 so that DG becomes minimum on the vectorscope.
- Confirm that DC level difference of video signal at TP5 is less than 0.2V when switching the CUT switch ON and OFF.
  If it is not, readjust VR5.

h) MIX Balance Adjustment for EFF Channel
(MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

Observe:	**Waveform monitor**
Adjusts:	**VR8, VR14 (EFF-ch. MIX BALANCE)**

- Select No. 8 (No. Input) on input C.
- Set the CUT switch to OFF.
- While moving the MIX Lever from upper to lower position, adjust VR8 and VR14 so that signal becomes as shown below.



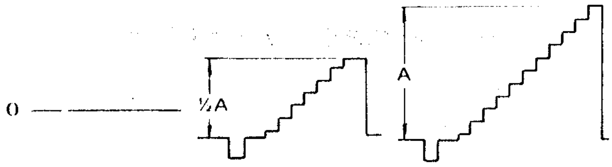
Lever at lower Lever at center Lever at upper

Fig. 80

i) MIX Balance Adjustment for C-ch Input
(MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

Observe:	**Waveform monitor**
Adjusts:	**VR9, VR15 (C-ch MIX BALANCE)**

- Select No. 8 (No. Input) on input A and B.
- Select No. 6 (G/L) on input C.
- While moving the MIX lever from Lower to Upper position, adjust VR9 and VR15 so that signal becomes as shown below.



Lever at upper Lever at center Lever at lower

Fig. 81

j) Confirmation of MIX Balance
(MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

- Select No. 6 (G/L) on input A, B and C.
- While moving the MIX lever, observe video level with the waveform monitor.
- If there is level difference at upper and lower position of the MIX lever, readjust VR2 so that video level becomes same.
- If video level changes more than 5 IRE (0.036V) throughout the MIX lever tracking, readjust VR9 and VR15 so that level change becomes less than ±5 IRE (0.036V).

k) Sync Separation Adjustment
(MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

Test points:	**TP1** **TP4**
Adjusts:	**VR4 (MIX SYNC SEPA.)** **VR13 (PREV-ch SYNC SEPA.)**

- Adjust VR4 so that sync signal at TP1 is approx. 0.18Vp-p.
- Adjust VR13 so that sync signal at TP4 is approx. 0.18Vp-p.

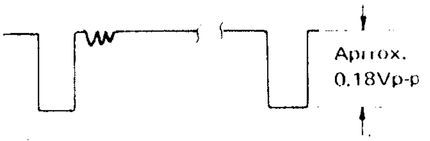


Fig. 82

PROGRAM OUT CIRCUIT

- Refer to page 14 and 15 for test points and adjusting controls.
- Connect the waveform monitor and vectorscope to PROGRAM OUTPUT connector.

a) Phase Cont. Adjustment
(MIX, CUT CONTROL CIRCUIT BOARD, EZK03)

Observe:	**Vectorscope**
Adjusts:	**VR1 (C-ch CHROMA PHASE)** **VR10 (PREV-ch CHROMA PHASE 2)** **VR11 (PREV-ch CHROMA PHASE 1)**

- Select No. 6 (G/L) on input A, B, C and EFF on PREVIEW/PROGRAM selector.
- Select color bar signal of the video signal generator.
- Set the MIX lever and WIPE lever to upper position.
- Set color bar vectors to proper position on the vectorscope.
- Move the MIX lever from upper to lower position.
- Adjust VR1 so that color bar phase becomes same as when the MIX lever was upper position.
- Set the CUT switch to ON.
- Set the MIX lever to upper position.
- Adjust VR11 so that color bar phase does not change when switching the CUT switch ON and OFF.
- Select No. 7 (C/B) on PREVIEW/PROGRAM selector.
- Adjust VR10 so that color bar phase does not change when switching the CUT switch ON and OFF.

b) DC Balance Adjustment (PREVIEW/PROGRAM OUT CIRCUIT BOARD, EZK07)

Observe: TP6
Adjust: VR9 (PROGRAM DC BALANCE)

- Supply stairstep signal to GEN LOCK input connector.
- Select No. 6 (G/L) on input A, B and C.
- Select No. 8 (No. Input) on PREVIEW/PROGRAM selector.
- Set the GEN LOCK switch to ON.
- Set the CUT switch to ON.
- Adjust VR9 so that DC level at TP6 becomes 0V.

c) Gain and Setup Adjustment (PREVIEW/PROGRAM OUT CIRCUIT BOARD, EZK07)

Observe: Waveform monitor
Adjusts: VR5 (SETUP)
VR8 (PROGRAM GAIN 1)
VR11 (PROGRAM GAIN 2)

- Supply stairstep signal to GEN LOCK input and AUX input connectors.
- Select AUX on PREVIEW/PROGRAM selector.
- Turn VR7 fully counterclockwise.
- Set VR8 to its mechanical center.
- Select No. 8 (No. Input) on PREVIEW/PROGRAM selector.
- Adjust VR5 so that setup level becomes 2 IRE (0.014V).
- Select No. 6 (G/L) on PREVIEW/PROGRAM selector.
- Adjust VR11 so that video signal becomes 102 IRE (0.728Vp-p).

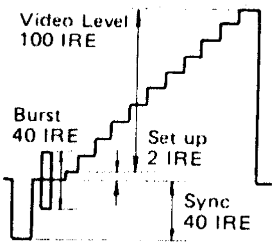


Fig. 83

d) Sync level and Burst level adjustment. (PREVIEW/PROGRAM OUT CIRCUIT BOARD, EZK07)

Observe: Waveform monitor
Adjusts: VR4 (BURST GAIN)
VR10 (SYNC GAIN)

- Adjust VR10 so that sync signal becomes 40 IRE (0.286Vp-p) on the waveform monitor.
- Adjust VR4 so that burst signal becomes 40 IRE (0.286Vp-p).

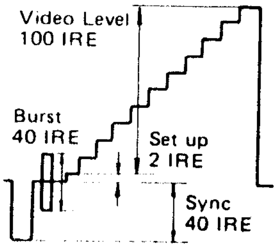


Fig. 84

e) DG, DP Adjustment (PREVIEW/PROGRAM OUT CIRCUIT BOARD, EZK07)

Observe: Vectorscope
Adjust: VR6 (PROGRAM DG/DP)

- Supply modulated stairstep signal to GEN LOCK input connector.
- Adjust VR6 so that DG becomes less than 1.2% and DP becomes less than 1.2°.

f) Blanking Spike Comp. (PREVIEW/PROGRAM OUT CIRCUIT BOARD EZK07)

Observe: Waveform monitor
Adjust: VR12 (BL. SPIKE COMP.)

- Adjust VR12 so that blanking spike noise at back porch becomes minimum on the waveform monitor.

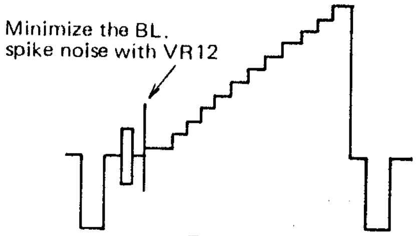


Fig. 85

g) White Clip Adjustment (PREVIEW/PROGRAM OUT CIRCUIT BOARD, EZK07)

Observe:	**Waveform monitor**
Adjust:	**VR7 (WHITE CLIP)**

- Separate the MIX lever so that video level becomes 130 IRE (0.93Vp-p) on the waveform monitor.
- Adjust VR7 so that video signal is clipped at 120 IRE (0.857Vp-p).

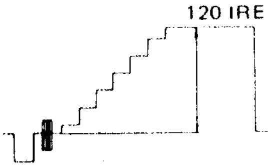


Fig. 86

h) Frequency Response Adjustment (PREVIEW/PROGRAM OUT CIRCUIT BOARD, EZK07)

Observe:	**Waveform monitor**
Adjust:	**C34 (FREQ. RESPONSE COMP.)**

- Supply 10 MHz sweep signal to GEN LOCK input connector.
- Select No. 6 (G/L) on PREVIEW/PROGRAM selector.
- Adjust C34 so that the output's frequency response is within ±0.5 dB at 3.58 MHz and within ±1.0 dB at 10 MHz.
- Readjust VR4 so that burst level is 40 IRE (0.286 Vp-p).

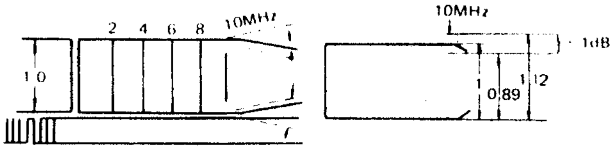
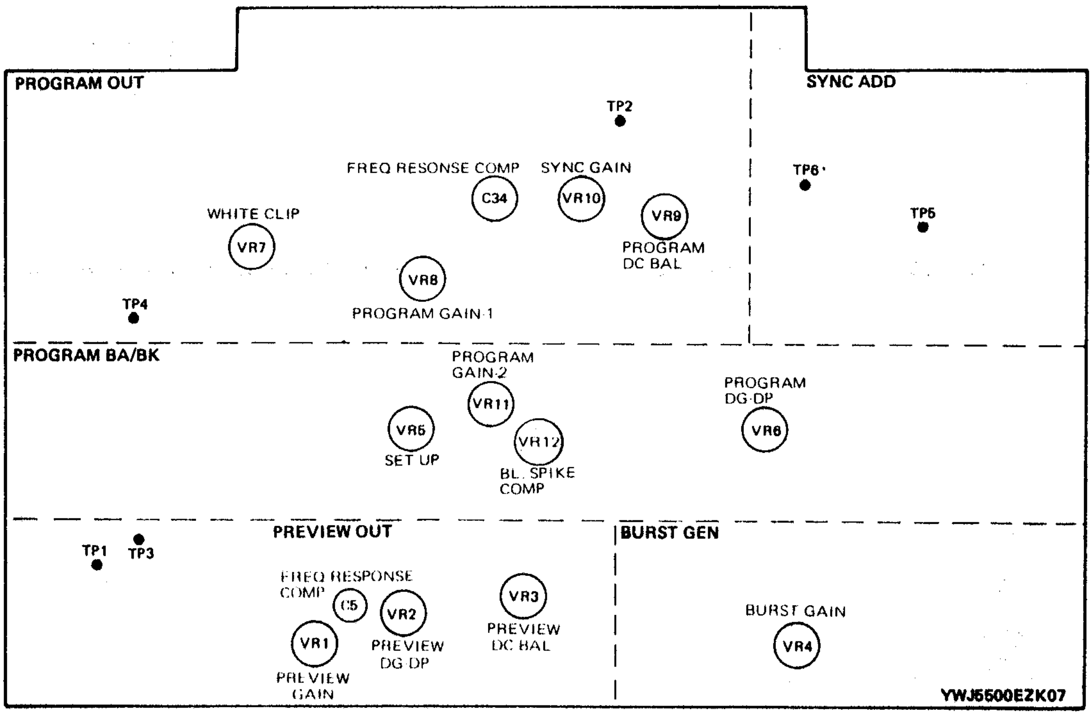

2
4
6
8
10MHz
1.0
10MHz
1dB
0.89
1.12

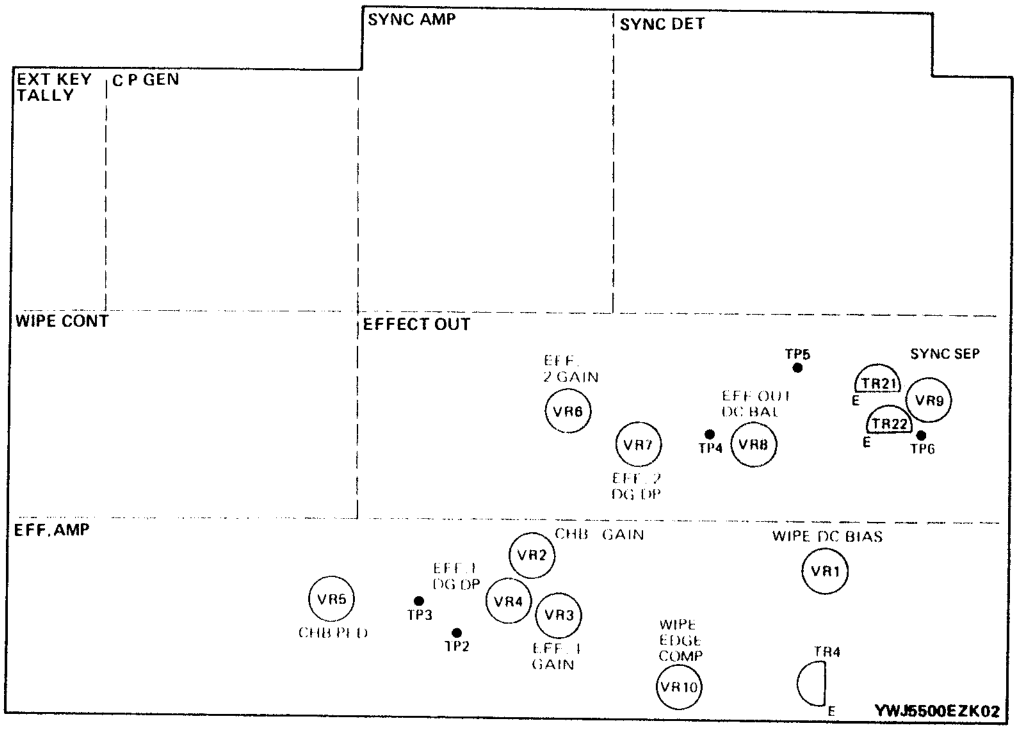
Fig. 87

LOCATION OF TEST POINTS AND CONTROLS

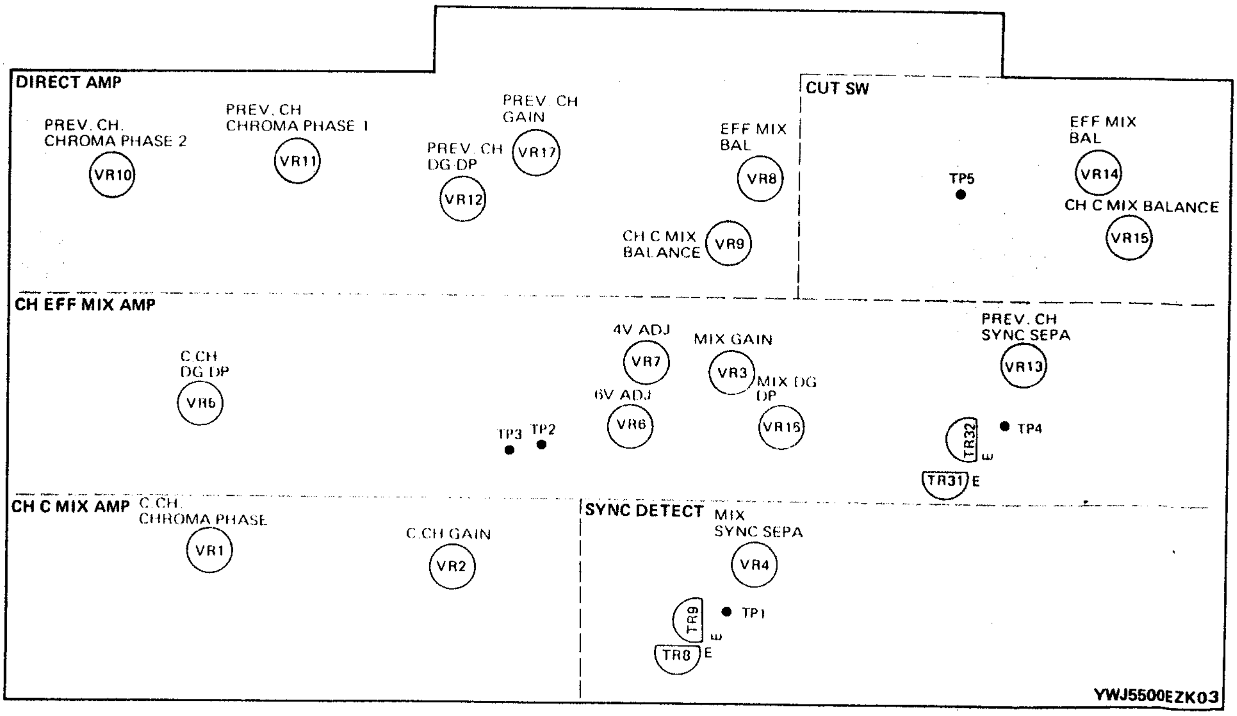

PROGRAM OUT
SYNC ADD
TP2
FREQ RESONSE COMP
C34
SYNC GAIN
VR10
VR9
PROGRAM DC BAL
TP6
TP5
WHITE CLIP
VR7
VR8
PROGRAM GAIN 1
TP4
PROGRAM BA/BK
PROGRAM GAIN 2
VR11
VR5
SET UP
VR12
BL. SPIKE COMP
PROGRAM DG·DP
VR6
PREVIEW OUT
BURST GEN
TP1
TP3
FREQ RESPONSE COMP
C5
VR2
PREVIEW DG·DP
VR1
PREVIEW GAIN
VR3
PREVIEW DC BAL
BURST GAIN
VR4
YWJ5500EZK07

REVIEW PROGRAM OUTPUT CIRCUIT BOARD (YWJ5500EZK07)

LOCATION OF TEST POINTS AND CONTROLS

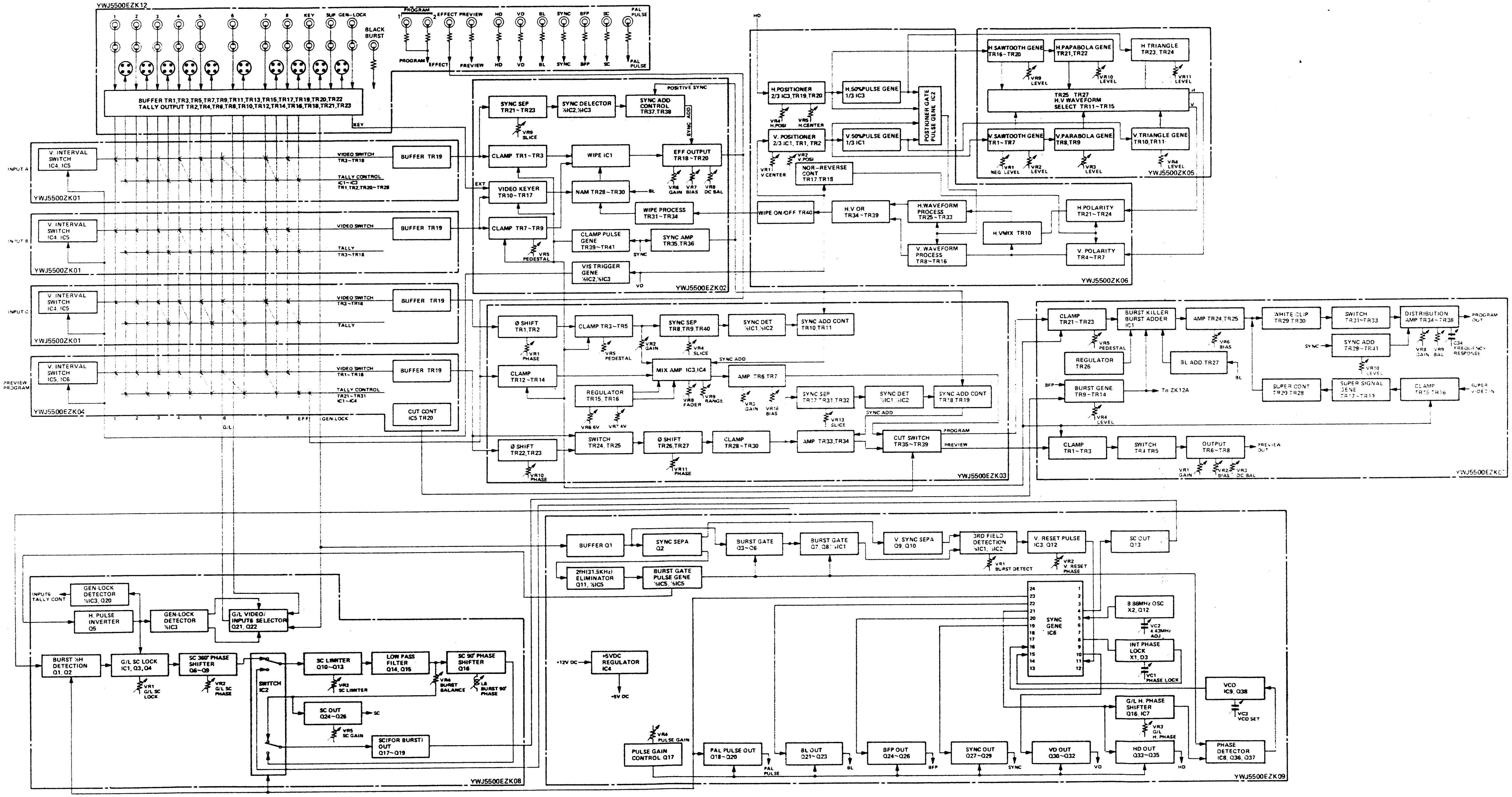

SYNC AMP
SYNC DET
EXT KEY TALLY
C P GEN
WIPE CONT
EFFECT OUT
EFF. 2 GAIN
VR6
TP5
SYNC SEP
TR21
E
VR9
EFF OUT DC BAL
TR22
E
TP6
VR7
TP4
VR8
EFF. 2 DG DP
EFF. AMP
CHB GAIN
WIPE DC BIAS
VR2
VR1
EFF. 1 DG DP
VR5
VR4
VR3
TP3
CHB PED
TP2
EFF. 1 GAIN
WIPE EDGE COMP
TR4
VR10
E
YWJ5500EZK02

WIPE, KEY, EFFECT OUTPUT CIRCUIT BOARD (YWJ5500EZK02)


DIRECT AMP
PREV. CH. CHROMA PHASE 2
VR10
PREV. CH CHROMA PHASE 1
VR11
PREV. CH GAIN
VR17
PREV. CH DG DP
VR12
EFF MIX BAL
VR8
CH C MIX BALANCE
VR9
CUT SW
TP5
EFF MIX BAL
VR14
CH C MIX BALANCE
VR15
CH EFF MIX AMP
C CH DG DP
VR6
4V ADJ
VR7
MIX GAIN
VR3
MIX DG DP
6V ADJ
VR6
VR16
TP3
TP2
PREV. CH SYNC SEPA
VR13
TR32
E
TP4
TR31
E
CH C MIX AMP
C CH. CHROMA PHASE
VR1
C.CH GAIN
VR2
SYNC DETECT
MIX SYNC SEPA
VR4
TR9
E
TP1
TR8
E
YWJ5500EZK03

MIX, CUT CONTROL CIRCUIT BOARD (YWJ5500EZK03)

BLOCK DIAGRAM OF WJ-5500N/E

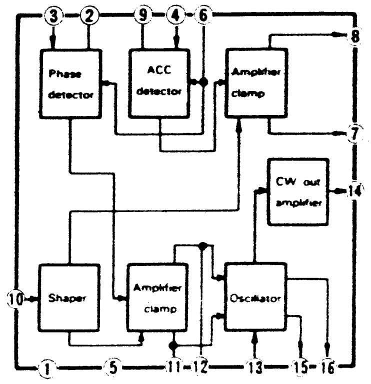


YWJ5500EZK12
BLACK BURST
PROGRAM
EFFECT PREVIEW
EFFECT
PREVIEW
HD
VD
BL
SYNC
BFP
SC
PAL PULSE
KEY
GEN-LOCK
BUFFER TR1,TR3,TR5,TR7,TR9,TR11,TR13,TR15,TR17,TR19,TR20,TR22
TALLY OUTPUT TR2,TR4,TR6,TR8,TR10,TR12,TR14,TR16,TR18,TR21,TR23
INPUT A
INPUT B
INPUT C
PREVIEW PROGRAM
V. INTERVAL SWITCH IC4, IC5
V. INTERVAL SWITCH IC5, IC6
YWJ5500ZK01
YWJ5500EZK04
VIDEO SWITCH TR3~TR18
TALLY CONTROL
BUFFER TR19
TALLY
CUT CONT IC5 TR20
SYNC SEP TR21~TR23
SYNC DELECTOR ½IC2,½IC3
SYNC ADD CONTROL TR37,TR38
POSITIVE SYNC
CLAMP TR1~TR3
WIPE IC1
EFF OUTPUT TR18~TR20
VIDEO KEYER TR10~TR17
NAM TR28~TR30
WIPE PROCESS TR31~TR34
CLAMP TR7~TR9
CLAMP PULSE GENE TR39~TR41
SYNC AMP TR35,TR36
VIS TRIGGER GENE ½IC2,½IC3
YWJ5500EZK02
H.POSITIONER 2/3 IC3,TR19,TR20
V. POSITIONER 2/3 IC1, TR1, TR2
H.50%PULSE GENE 1/3 IC3
V.50%PULSE GENE 1/3 IC1
POSTIONER GATE PULSE GENE IC2
NOR-REVERSE CONT TR17,TR18
WIPE ON/OFF TR40
H.V OR TR34~TR39
H.WAVEFORM PROCESS TR25~TR33
V. WAVEFORM PROCESS TR8~TR16
H.VMIX TR10
H.POLARITY TR21~TR24
V. POLARITY TR4~TR7
YWJ5500ZK06
H.SAWTOOTH GENE TR16~TR20
H.PAPABOLA GENE TR21,TR22
H.TRIANGLE TR23, TR24
TR25~TR27 H.V WAVEFORM SELECT TR11~TR15
V.SAWTOOTH GENE TR1~TR7
V.PARABOLA GENE TR8,TR9
V.TRIANGLE GENE TR10,TR11
YWJ5500ZK05
Ø SHIFT TR1,TR2
CLAMP TR3~TR5
SYNC SEP TR8,TR9,TR40
SYNC DET ½IC1,½IC2
SYNC ADD CONT TR10,TR11
CLAMP TR12~TR14
MIX AMP IC3,IC4
AMP TR6,TR7
REGULATOR TR15, TR16
SYNC SEP TR11,TR31,TR32
SYNC DET ½IC1,½IC2
SYNC ADD CONT TR18,TR19
SWITCH TR24, TR25
Ø SHIFT TR26,TR27
CLAMP TR28~TR30
AMP TR33,TR34
CUT SWITCH TR35~TR39
Ø SHIFT TR22,TR23
YWJ5500EZK03
CLAMP TR21~TR23
BURST KILLER BURST ADDER IC1
AMP TR24,TR25
WHITE CLIP TR29,TR30
SWITCH TR31~TR33
DISTRIBUTION AMP TR34~TR38
PROGRAM OUT
REGULATOR TR26
BL ADD TR27
SYNC ADD TR29~TR31
BURST GENE TR9~TR14
To ZK12A
SUPER CONT TR29,TR28
SUPER SIGNAL GENE TR17~TR19
CLAMP TR15,TR16
SUPER VIDEO IN
CLAMP TR1~TR3
SWITCH TR4,TR5
OUTPUT TR6~TR8
PREVIEW OUT
YWJ5500EZK07
GEN-LOCK DETECTOR ½IC3, Q20
INPUT6 TALLY CONT
H. PULSE INVERTER Q5
GEN-LOCK DETECTOR ½IC3
G/L VIDEO/ INPUT6 SELECTOR Q21, Q22
BURST ½H DETECTION Q1, Q2
G/L SC LOCK IC1, Q3, Q4
SC 360° PHASE SHIFTER Q6~Q9
SWITCH IC2
SC LIMITER Q10~Q13
LOW PASS FILTER Q14, Q15
SC 90° PHASE SHIFTER Q16
SC OUT Q24~Q26
SC(FOR BURST) OUT Q17~Q19
YWJ5500EZK08
BUFFER Q1
SYNC SEPA Q2
BURST GATE Q3~Q6
BURST GATE Q7, Q8, ½IC1
V. SYNC SEPA Q9, Q10
3RD FIELD DETECTION ½IC1, ½IC2
V. RESET PULSE IC3, Q12
SC OUT Q13
2fH(31.5KHz) ELIMINATOR Q11, ½IC5
BURST GATE PULSE GENE ½IC5, ½IC5
SYNC GENE IC6
8.86MHz OSC X2, Q12
INT PHASE LOCK X1, Q3
+12V DC
+5VDC REGULATOR IC4
+5V DC
G/L H. PHASE SHIFTER Q16, IC7
VCO IC9, Q38
PHASE DETECTOR IC8, Q36, Q37
PULSE GAIN CONTROL Q17
PAL PULSE OUT Q18~Q20
BL OUT Q21~Q23
BFP OUT Q24~Q26
SYNC OUT Q27~Q29
VD OUT Q30~Q32
HD OUT Q33~Q35
YWJ5500EZK09

SCHEMATIC DIAGRAMS OF ICs

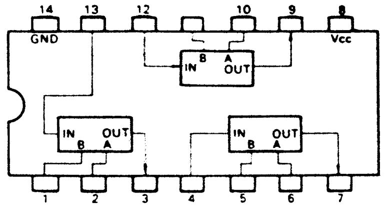
AN236

(Subcarrier Processing Circuit)


③
②
⑨
④
⑥
8
Phase detector
ACC detector
Amplifier clamp
7
CW out amplifier
14
⑩
Shaper
Amplifier clamp
Oscillator
①
⑤
11
12
13
15
16

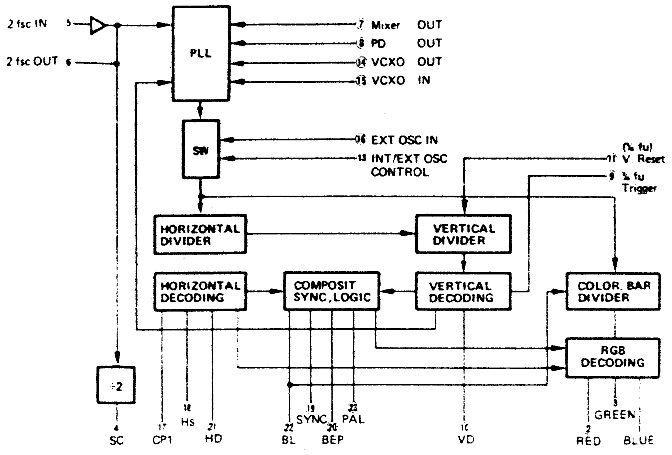
DN850

(Triple Monostable Multivibrators)


14
13
12
10
9
8
GND
Vcc
IN
B
A
OUT
1
2
3
4
5
6
7

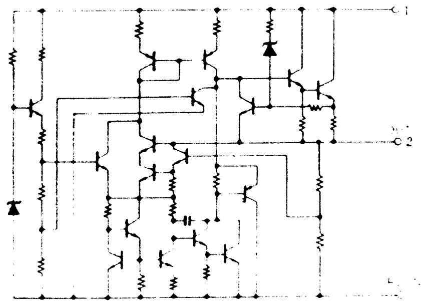
MN6065

(PAL Sync Generator)


2 fsc IN 5
2 fsc OUT 6
PLL
7 Mixer OUT
8 PD OUT
14 VCXO OUT
15 VCXO IN
SW
16 EXT OSC IN
13 INT/EXT OSC CONTROL
(⅛ fu)
11 V. Reset
9 ⅛ fu Trigger
HORIZONTAL DIVIDER
VERTICAL DIVIDER
HORIZONTAL DECODING
COMPOSIT SYNC, LOGIC
VERTICAL DECODING
COLOR. BAR DIVIDER
RGB DECODING
÷2
4 SC
17 CP1
18 HS
21 HD
22 BL
19 SYNC
20 BEP
23 PAL
10 VD
2 RED
3 GREEN
BLUE

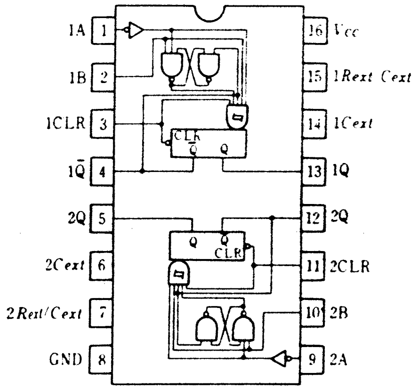
YHSFS-7805M

(Voltage Regulator)



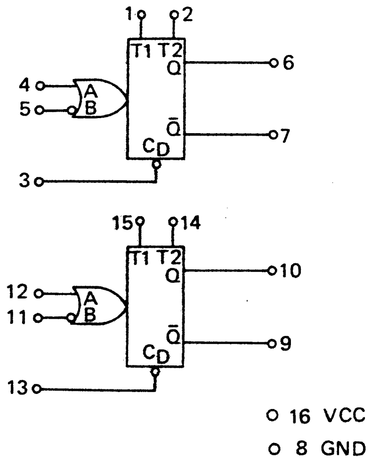
YWHD74221P
YWHD74LS221P

(Dual Monostable Multivibrators with Schmitt Trigger Input)


1A 1
1B 2
1CLR 3
1Q̄ 4
2Q 5
2Cext 6
2Rext/Cext 7
GND 8
16 Vcc
15 1Rext Cext
14 1Cext
13 1Q
12 2Q̄
11 2CLR
10 2B
9 2A
CLR
Q̄
Q
CLR

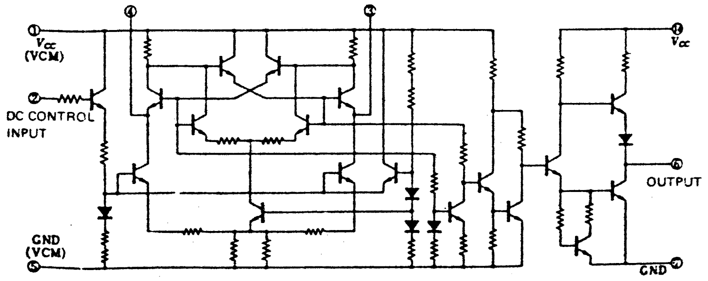
YWMC14528BCP

(Dual Retriggerable/Resettable Monostable Multivibrator)


1
2
T1 T2
Q
Q̄
CD
A
B
4
5
6
7
3
15
14
12
11
10
9
13
o 16 VCC
o 8 GND

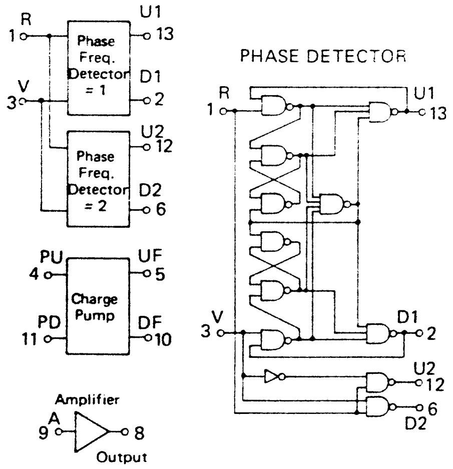
YWMC4024P

(Voltage Controlled Oscillator)

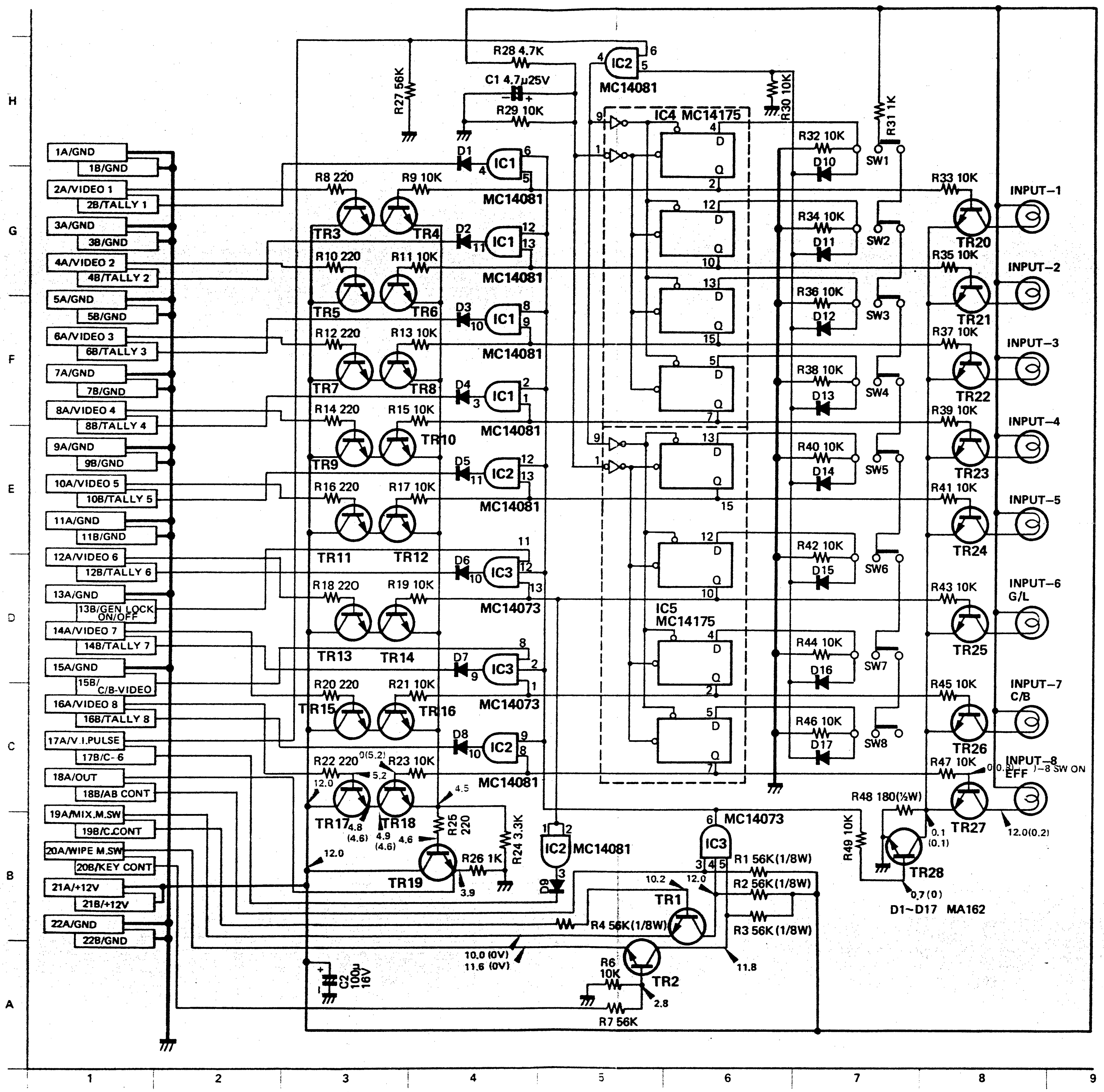

①
Vcc (VCM)
②
DC CONTROL INPUT
GND (VCM)
⑤
④
③
⑧
Vcc
⑥
OUTPUT
GND ⑦

YWMC4044P

(Phase/Frequency Detector)


R
1
V
3
Phase Freq. Detector = 1
U1
13
D1
2
Phase Freq. Detector = 2
U2
12
D2
6
PU
4
PD
11
Charge Pump
UF
5
DF
10
Amplifier
A
9
8
Output
PHASE DETECTOR
R
1
U1
13
V
3
D1
2
U2
12
6
D2

SCHEMATIC DIAGRAM OF VIDEO CROSS POINT-1 CIRCUIT BOARD (YWJ5500ZK01)

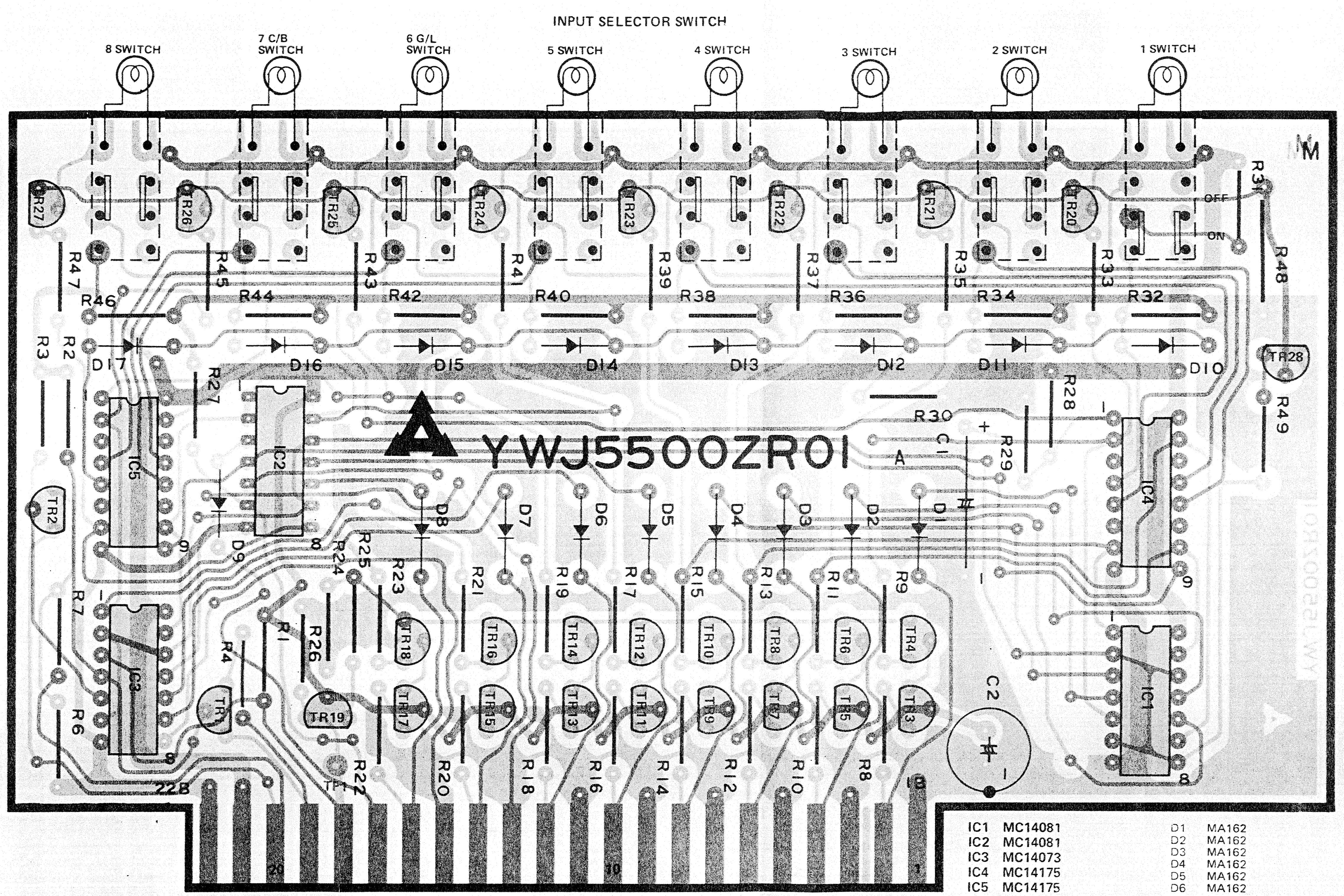

H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
1A/GND
1B/GND
2A/VIDEO 1
2B/TALLY 1
3A/GND
3B/GND
4A/VIDEO 2
4B/TALLY 2
5A/GND
5B/GND
6A/VIDEO 3
6B/TALLY 3
7A/GND
7B/GND
8A/VIDEO 4
8B/TALLY 4
9A/GND
9B/GND
10A/VIDEO 5
10B/TALLY 5
11A/GND
11B/GND
12A/VIDEO 6
12B/TALLY 6
13A/GND
13B/GEN LOCK ON/OFF
14A/VIDEO 7
14B/TALLY 7
15A/GND
15B/C/B-VIDEO
16A/VIDEO 8
16B/TALLY 8
17A/V.I.PULSE
17B/C-6
18A/OUT
18B/AB CONT
19A/MIX.M.SW
19B/C.CONT
20A/WIPE M.SW
20B/KEY CONT
21A/+12V
21B/+12V
22A/GND
22B/GND
R27 56K
R28 4.7K
C1 4.7μ25V
R29 10K
IC2
MC14081
IC4 MC14175
R30 10K
R31 1K
D1
IC1
MC14081
R8 220
R9 10K
TR3
TR4
D2
R10 220
R11 10K
TR5
TR6
D3
R12 220
R13 10K
TR7
TR8
D4
R14 220
R15 10K
TR9
TR10
D5
R16 220
R17 10K
TR11
TR12
D6
IC3
MC14073
R18 220
R19 10K
TR13
TR14
D7
R20 220
R21 10K
TR15
TR16
D8
R22 220
R23 10K
TR17
TR18
TR19
R25 220
R24 3.3K
R26 1K
C2 100μ 16V
D9
IC5 MC14175
R32 10K
D10
SW1
R33 10K
TR20
INPUT-1
R34 10K
D11
SW2
R35 10K
TR21
INPUT-2
R36 10K
D12
SW3
R37 10K
TR22
INPUT-3
R38 10K
D13
SW4
R39 10K
TR23
INPUT-4
R40 10K
D14
SW5
R41 10K
TR24
INPUT-5
R42 10K
D15
SW6
R43 10K
TR25
INPUT-6 G/L
R44 10K
D16
SW7
R45 10K
TR26
INPUT-7 C/B
R46 10K
D17
SW8
R47 10K
TR27
INPUT-8 EFF
0(0.3)
)-8 SW ON
12.0(0.2)
R48 180(½W)
R49 10K
TR28
0.1 (0.1)
0.7(0)
D1~D17 MA162
MC14073
R1 56K(1/8W)
R2 56K(1/8W)
R3 56K(1/8W)
R4 56K(1/8W)
TR1
R6 10K
TR2
R7 56K
10.2
12.0
11.8
2.8
10.0 (0V)
11.6 (0V)
0(5.2)
5.2
12.0
4.5
4.8 (4.6)
4.9 (4.6)
4.6
3.9

D1	MA162	H–4
D2	MA162	C–4
D3	MA162	F–4
D4	MA162	F–4
D5	MA162	E–4
D6	MA162	D–4
D7	MA162	D–4
D8	MA162	C–4
D9	MA162	B–5
D10	MA162	G–7
D11	MA162	G–7
D12	MA162	F–7
D13	MA162	F–7
D14	MA162	E–7
D15	MA162	D–7
D16	MA162	C–7
D17	MA162	C–7

TR1	2SC828RS	B–6
TR2	2SC828RS	A–5
TR3	2SC828RS	G–3
TR4	2SC828RS	G–3
TR5	2SC828RS	G–3
TR6	2SC828RS	G–3
TR7	2SC828RS	F–3
TR8	2SC828RS	F–3
TR9	2SC828RS	E–3
TR10	2SC828RS	E–3
TR11	2SC828RS	E–3
TR12	2SC828RS	E–3
TR13	2SC828RS	D–3
TR14	2SC828RS	D–3
TR15	2SC828RS	C–3
TR16	2SC828RS	C–3
TR17	2SC828RS	C–3
TR18	2SC828RS	C–3
TR19	2SC828RS	B–4
TR20	2SC1318QR	G–8
TR21	2SC1318QR	F–8
TR22	2SC1318QR	F–8
TR23	2SC1318QR	E–8
TR24	2SC1318QR	E–8
TR25	2SC1318QR	D–8
TR26	2SC1318QR	C–8
TR27	2SC1318QR	C–8
TR28	2SC1318QR	B–7

IC1	YWMC14081BCP	G F–4
IC2	YWMC14081BCP	H–5,E–4,C–4,B–5
IC3	YWMC14073BCP	D–4,B–6
IC4	YWMC14175BCP	H C–6

CONDUCTOR VIEW OF YWJ5500ZK01
(VIDEO CROSS POINT-1 CIRCUIT BOARD)


INPUT SELECTOR SWITCH
8 SWITCH
7 C/B SWITCH
6 G/L SWITCH
5 SWITCH
4 SWITCH
3 SWITCH
2 SWITCH
1 SWITCH
OFF
ON
M
YWJ5500ZR01
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
TR13
TR14
TR15
TR16
TR17
TR18
TR19
TR20
TR21
TR22
TR23
TR24
TR25
TR26
TR27
TR28
IC1
IC2
IC3
IC4
IC5
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
R1
R2
R3
R4
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R35
R36
R37
R38
R39
R40
R41
R42
R43
R44
R45
R46
R47
R48
R49
C1
C2
TP1
A
+
22B
18
20
10
1
8
9

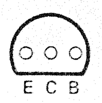
COMPONENTS SIDE

IC1	MC14081
IC2	MC14081
IC3	MC14073
IC4	MC14175
IC5	MC14175

D1	MA162
D2	MA162
D3	MA162
D4	MA162
D5	MA162
D6	MA162
D7	MA162
D8	MA162
D9	MA162
D10	MA162
D11	MA162
D12	MA162
D13	MA162
D14	MA162
D15	MA162
D16	MA162
D17	MA162

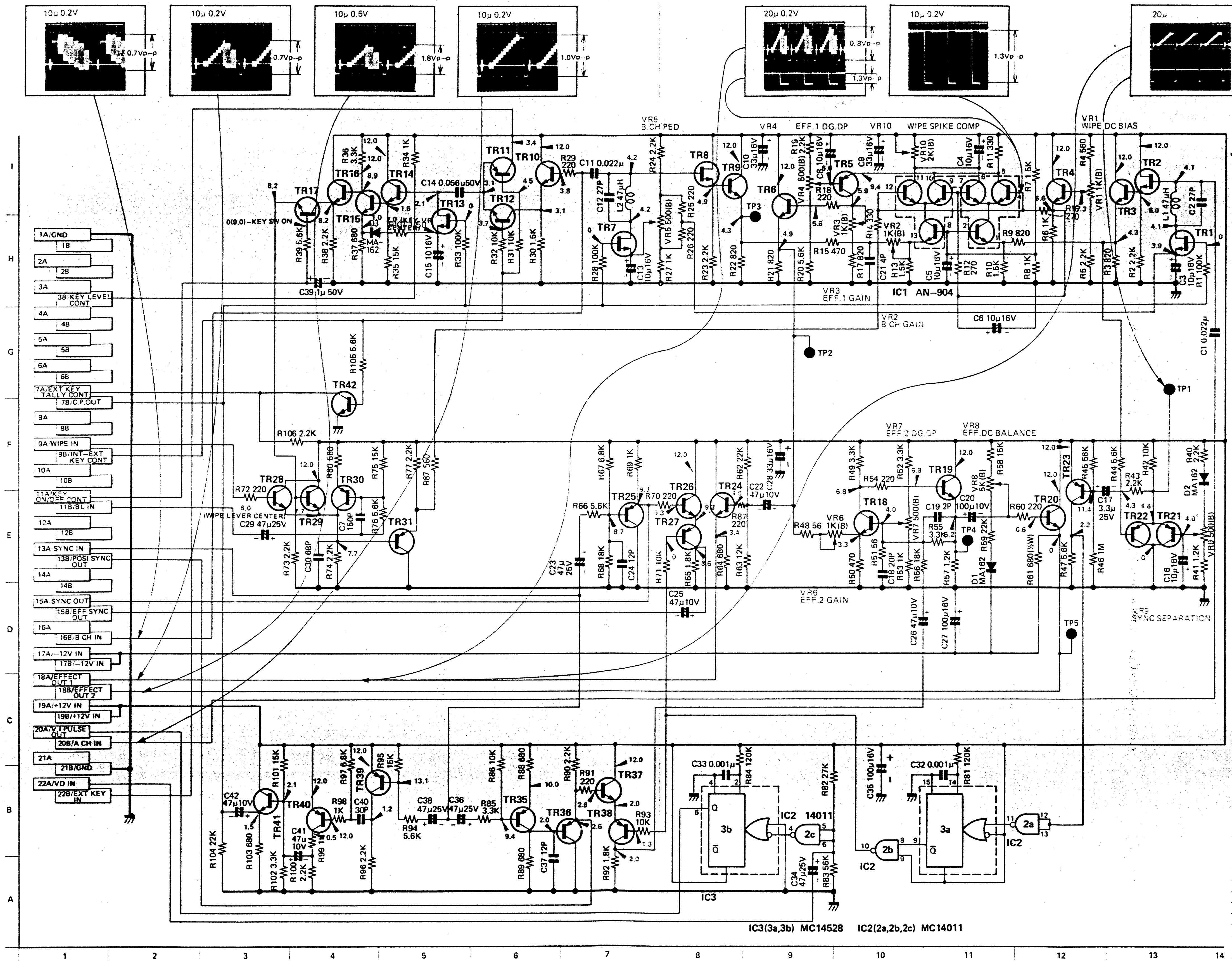
TR1	2SC828RS
TR2	2SC828RS
TR3	2SC828RS
TR4	2SC828RS
TR5	2SC828RS
TR6	2SC828RS
TR7	2SC828RS
TR8	2SC828RS
TR9	2SC828RS
TR10	2SC828RS
TR11	2SC828RS
TR12	2SC828RS
TR13	2SC828RS
TR14	2SC828RS
TR15	2SC828RS
TR16	2SC828RS
TR17	2SC828RS
TR18	2SC828RS
TR19	2SC828RS
TR20	2SC1318QR
TR21	2SC1318QR
TR22	2SC1318QR
TR23	2SC1318QR
TR24	2SC1318QR
TR25	2SC1318QR
TR26	2SC1318QR
TR27	2SC1318QR
TR28	2SC1318QR

(Top View)



All Transistors

SCHEMATIC DIAGRAM OF WIPE. KEY. EFFECT OUTPUT CIRCUIT BOARD (YWJ5500EZK02)

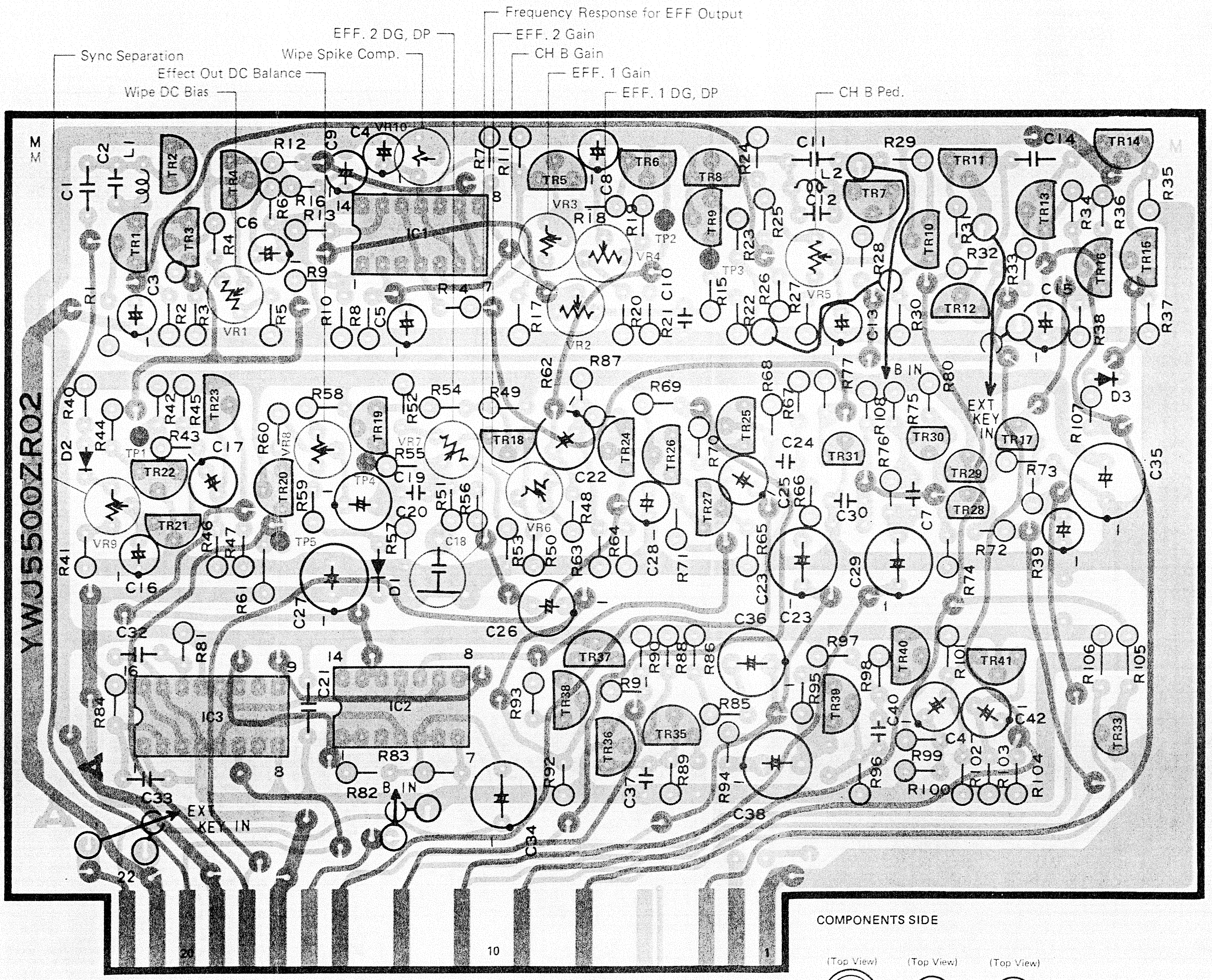

10μ 0.2V
0.7Vp-p
10μ 0.2V
0.7Vp-p
10μ 0.5V
1.8Vp-p
10μ 0.2V
1.0Vp-p
20μ 0.2V
0.8Vp-p
1.3Vp-p
10μ 0.2V
1.3Vp-p
20μ
Pulse 0.15Vp-p
VR5 B.CH PED
VR4 EFF.1 DG.DP
VR10 WIPE SPIKE COMP
VR1 WIPE DC BIAS
VR3 EFF.1 GAIN
IC1 AN-904
VR2 B.CH GAIN
VR7 EFF.2 DG.DP
VR8 EFF.DC BALANCE
VR6 EFF.2 GAIN
VR9 SYNC SEPARATION
(WIPE LEVER CENTER)
0(9.0)-KEY SW ON
TP1
TP2
TP3
TP4
TP5
1A/GND
1B
2A
2B
3A
3B/KEY LEVEL CONT
4A
4B
5A
5B
6A
6B
7A/EXT KEY TALLY CONT
7B/C.P.OUT
8A
8B
9A/WIPE IN
9B/INT-EXT KEY CONT
10A
10B
11A/KEY ON/OFF CONT
11B/BL IN
12A
12B
13A/SYNC IN
13B/POSI SYNC OUT
14A
14B
15A/SYNC OUT
15B/EFF SYNC OUT
16A
16B/B CH IN
17A/-12V IN
17B/-12V IN
18A/EFFECT OUT 1
18B/EFFECT OUT 2
19A/+12V IN
19B/+12V IN
20A/V PULSE OUT
20B/A CH IN
21A
21B/GND
22A/VD IN
22B/EXT KEY IN
IC2 14011
IC3
IC3(3a,3b) MC14528
IC2(2a,2b,2c) MC14011
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14

D1	MA162	E−11
D2	MA162	F−13
D3	MA162	H−4

TR1	2SK34CD	H−13
TR2	2SK19Y	I−13
TR3	2SC828RS	I−13
TR4	2SC828RS	I−12
TR5	2SA838BC	I−10
TR6	2SC828RS	I−9
TR7	2SK34−CD	H−7
TR8	2SK19Y	I−8
TR9	2SC828RS	I−8
TR10	2SC828RS	I−8
TR11	2SA564RS	I−6
TR12	2SC828RS	I−6
TR13	2SK34CD	H−5
TR14	2SC828RS	I−5
TR15	2SC1047CD	I−4
TR16	2SC828RS	I−4
TR17	2SC828RS	I−4
TR18	2SC1047CD	E−10
TR19	2SC828RS	F−11
TR20	2SC1383PQ	E−12
TR21	2SA564RS	E−13
TR22	2SA564RS	E−13
TR23	2SA564RS	E−12
TR24	2SC828RS	E−8
TR25	2SA564RS	E−7
TR26	2SC828RS	E−8
TR27	2SA564RS	E−8
TR28	2SC828RS	E−3
TR29	2SC828RS	E−4
TR30	2SA564RS	E−4
TR31	2SA564RS	E−5
TR33	2SC828RS	F−4
TR35	2SA564RS	B−6
TR36	2SA564RS	B−7
TR37	2SC828RS	B−7
TR38	2SA564RS	B−7
TR39	2SA564RS	B−4
TR40	2SA564RS	B−4
TR41	2SC828RS	B−3

IC1	AN904	I~H−11
IC2	YWMC14011BCP	A−10
IC3	YWMC14528BCP	A−9

CONDUCTOR VIEW OF YWJ5500EZK02
(WIPE. KEY. EFFECT OUTPUT CIRCUIT BOARD)

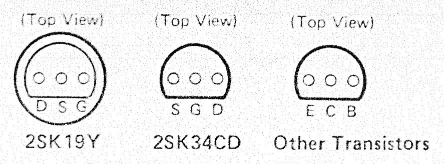

Frequency Response for EFF Output
EFF. 2 DG, DP
EFF. 2 Gain
Sync Separation
Wipe Spike Comp.
CH B Gain
Effect Out DC Balance
EFF. 1 Gain
Wipe DC Bias
EFF. 1 DG, DP
CH B Ped.
YWJ5500ZR02
IC1
IC2
IC3
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
VR9
VR10
TP1
TP2
TP3
TP4
TP5
B IN
EXT KEY IN
EXT KEY IN
B IN
22
20
10
1

TR1	2SK34CD
TR2	2SK19Y
TR3	2SC828RS
TR4	2SC828RS
TR5	2SA838BC
TR6	2SC828RS
TR7	2SK34–CD
TR8	2SK19Y
TR9	2SC828RS
TR10	2SC828RS
TR11	2SA564RS
TR12	2SC828RS
TR13	2SK34CD
TR14	2SC828RS
TR15	2SC1047CD
TR16	2SC828RS
TR17	2SC828RS
TR18	2SC1047CD
TR19	2SC828RS
TR20	2SC1383PQ
TR21	2SA564RS
TR22	2SA564RS
TR23	2SA564RS
TR24	2SC828RS
TR25	2SA564RS
TR26	2SC828RS
TR27	2SA564RS
TR28	2SC828RS
TR29	2SC828RS
TR30	2SA564RS
TR31	2SA564RS
TR33	2SC828RS
TR35	2SA564RS
TR36	2SA564RS
TR37	2SC828RS
TR38	2SA564RS
TR39	2SA564RS
TR40	2SA564RS
TR41	2SC828RS

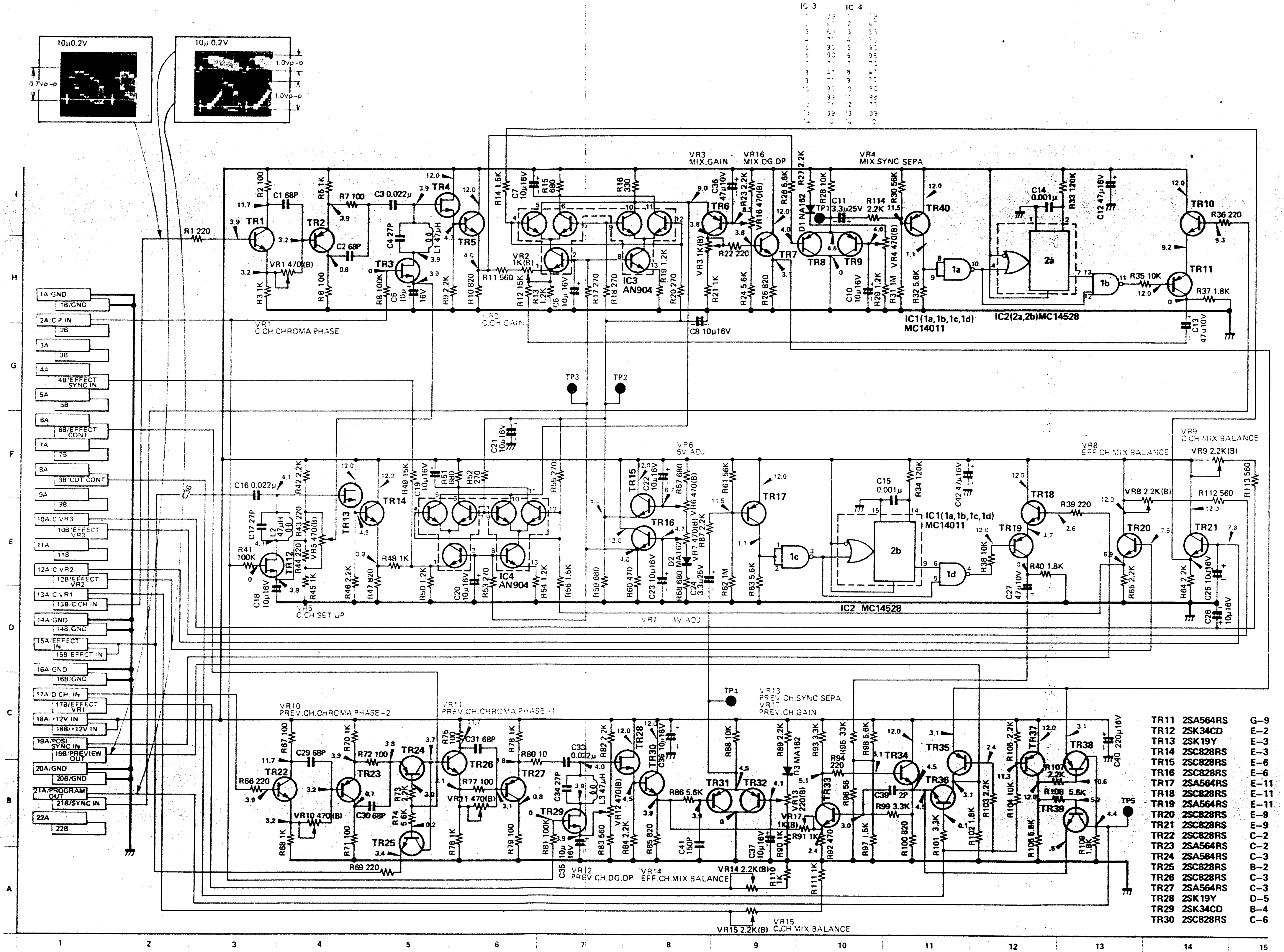
IC1	AN904
IC2	YWMC14011BCP
IC3	YWMC14528BCP

D1	MA162	D–7
D2	MA162	E–9
D3	MA162	F–3

COMPONENTS SIDE


(Top View)
(Top View)
(Top View)
D S G
S G D
E C B
2SK19Y
2SK34CD
Other Transistors

SCHEMATIC DIAGRAM OF MIX. CUT. CONTROL CIRCUIT BOARD (YWJ5500EZK03)


IC 3
IC 4
10μ 0.2V
0.7Vp-p
10μ 0.2V
1.0Vp-p
1.0Vp-p
VR3 MIX.GAIN
VR16 MIX.DG.DP
VR4 MIX.SYNC SEPA
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
IC3 AN904
IC1(1a,1b,1c,1d) MC14011
IC2(2a,2b)MC14528
VR1 C.CH.CHROMA PHASE
VR2 C.CH.GAIN
C8 10μ16V
TP3
TP2
VR6 5V ADJ
VR8 EFF.CH.MIX BALANCE
VR9 C.CH.MIX BALANCE
VR9 2.2K(B)
TR12
TR13
TR14
TR15
TR16
TR17
TR18
TR19
TR20
TR21
IC4 AN904
IC2 MC14528
VR5 C.CH.SET UP
VR7 4V ADJ
TP4
VR13 PREV.CH.SYNC SEPA
VR17 PREV.CH.GAIN
VR10 PREV.CH.CHROMA PHASE-2
VR11 PREV.CH.CHROMA PHASE-1
TR22
TR23
TR24
TR25
TR26
TR27
TR28
TR29
TR30
TR31
TR32
TR33
TR34
TR35
TR36
TR37
TR38
TR39
TP5
VR12 PREV.CH.DG.DP
VR14 EFF.CH.MIX BALANCE
VR14 2.2K(B)
VR15 C.CH.MIX BALANCE
VR15 2.2K(B)
1A GND
1B GND
2A C.P IN
2B
3A
3B
4A
4B EFFECT SYNC IN
5A
5B
6A
6B EFFECT CONT
7A
7B
8A
8B CUT CONT
9A
9B
10A C.VR3
10B EFFECT VR3
11A
11B
12A C.VR2
12B EFFECT VR2
13A C.VR1
13B C.CH IN
14A GND
14B GND
15A EFFECT IN
15B EFFECT IN
16A GND
16B GND
17A D.CH. IN
17B EFFECT VR1
18A +12V IN
18B +12V IN
19A POSI SYNC IN
19B PREVIEW OUT
20A GND
20B GND
21A PROGRAM OUT
21B SYNC IN
22A
22B
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

TR11	2SA564RS	G–9
TR12	2SK34CD	E–2
TR13	2SK19Y	E–3
TR14	2SC828RS	E–3
TR15	2SC828RS	E–6
TR16	2SC828RS	E–6
TR17	2SA564RS	E–11
TR18	2SC828RS	E–11
TR19	2SA564RS	E–11
TR20	2SC828RS	E–9
TR21	2SC828RS	E–9
TR22	2SC828RS	C–2
TR23	2SA564RS	C–2
TR24	2SA564RS	C–3
TR25	2SC828RS	B–2
TR26	2SC828RS	C–3
TR27	2SA564RS	C–3
TR28	2SK19Y	D–5
TR29	2SK34CD	B–4
TR30	2SC828RS	C–6

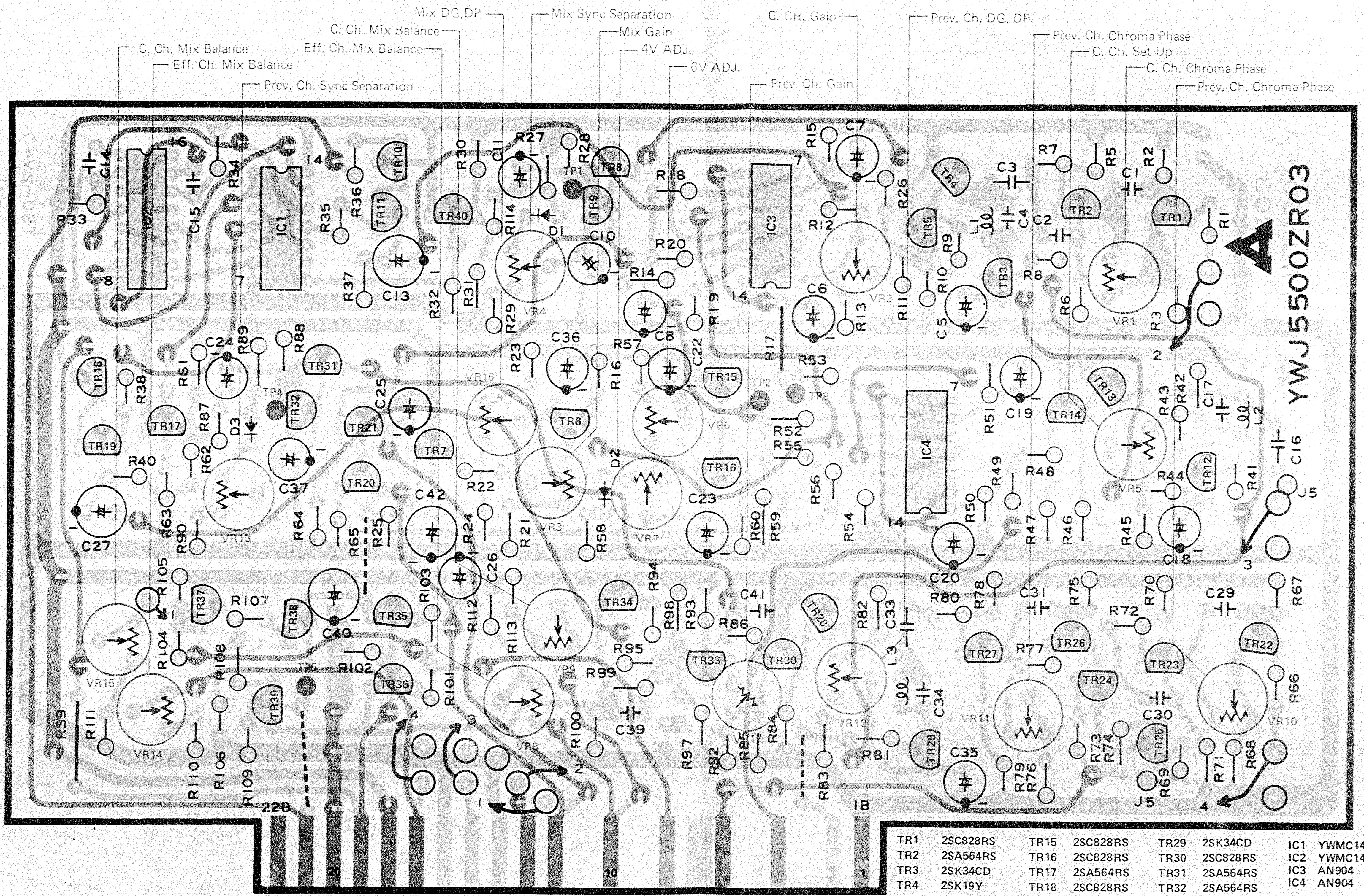
D1	MA162	I–10
D2	MA162	E–8
D3	MA162	B–9

IC1	YWMC14011BCP	H–11
IC2	YWMC14528BCP	H–12
IC3	AN904	H–6~8
IC4	AN904	E–6

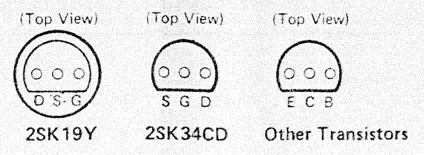
TR1	2SC828RS	G–2
TR2	2SA564RS	G–3
TR3	2SK34CD	F–4
TR4	2SK19Y	G–4
TR5	2SC828RS	G–4
TR6	2SA838BC	E–7
TR7	2SC828RS	E–8
TR8	2SA564RS	G–7
TR9	2SA564RS	G–7
TR10	2SC828RS	G–9

TR31	2SA564RS	F–9
TR32	2SA564RS	E–10
TR33	2SC1047CD	C–6
TR34	2SC828RS	D–7
TR35	2SA838BC	D–9
TR36	2SC1047C	C–9
TR37	2SA564RS	D–10
TR38	2SA838BC	D–10
TR39	2SC1047C	C–10
TR40	2SA564RS	G–8

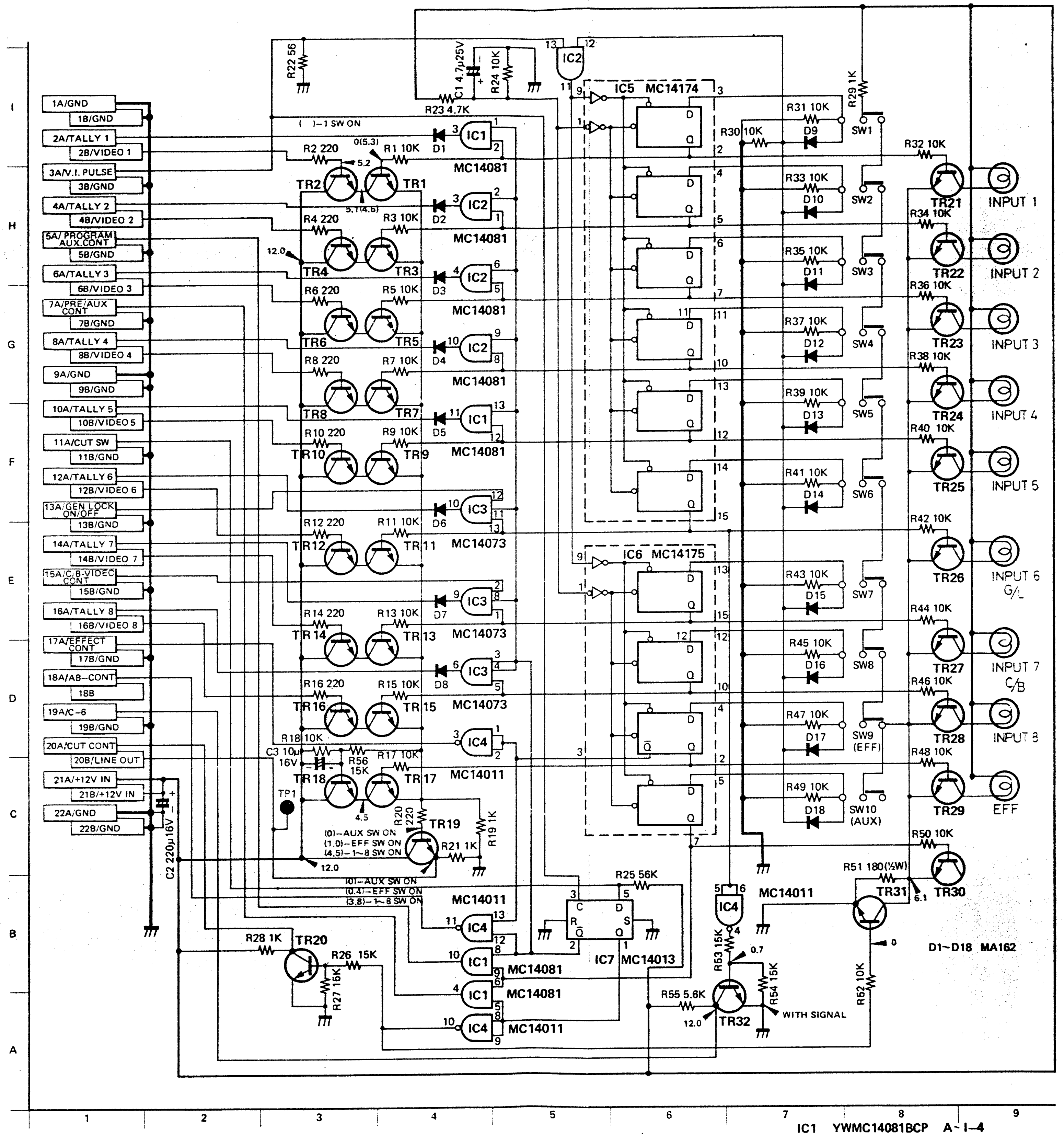
CONDUCTOR VIEW OF YWJ5500EZK03
(MIX. CUT. CONTROL CIRCUIT BOARD)


C. Ch. Mix Balance
Eff. Ch. Mix Balance
Prev. Ch. Sync Separation
Mix DG,DP
C. Ch. Mix Balance
Eff. Ch. Mix Balance
Mix Sync Separation
Mix Gain
4V ADJ.
6V ADJ.
C. CH. Gain
Prev. Ch. Gain
Prev. Ch. DG, DP.
Prev. Ch. Chroma Phase
C. Ch. Set Up
C. Ch. Chroma Phase
Prev. Ch. Chroma Phase
YWJ5500ZR03
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
VR9
VR10
VR11
VR12
VR13
VR14
VR15
VR16
IC1
IC2
IC3
IC4
J5
1B
22B
1
10
20

TR1	2SC828RS	TR15	2SC828RS	TR29	2SK34CD	IC1	YWMC14011BCP
TR2	2SA564RS	TR16	2SC828RS	TR30	2SC828RS	IC2	YWMC14528BCP
TR3	2SK34CD	TR17	2SA564RS	TR31	2SA564RS	IC3	AN904
TR4	2SK19Y	TR18	2SC828RS	TR32	2SA564RS	IC4	AN904
TR5	2SC828RS	TR19	2SA564RS	TR33	2SC1047CD		
TR6	2SA838BC	TR20	2SC828RS	TR34	2SC828RS	D1	MA162
TR7	2SC828RS	TR21	2SC828RS	TR35	2SA838BC	D2	MA162
TR8	2SA564RS	TR22	2SC828RS	TR36	2SC1047C	D3	MA162
TR9	2SA564RS	TR23	2SA564RS	TR37	2SA564RS		
TR10	2SC828RS	TR24	2SA564RS	TR38	2SA838BC		
TR11	2SA564RS	TR25	2SC828RS	TR39	2SC1047C		
TR12	2SK34CD	TR26	2SC828RS	TR40	2SA564RS		
TR13	2SK19Y	TR27	2SA564RS				
TR14	2SC828RS	TR28	2SK19Y				


(Top View)
D S G
2SK19Y
(Top View)
S G D
2SK34CD
(Top View)
E C B
Other Transistors

SCHEMATIC DIAGRAM OF VIDEO CROSS POINT-2 CIRCUIT BOARD (YWJ5500EZK04)

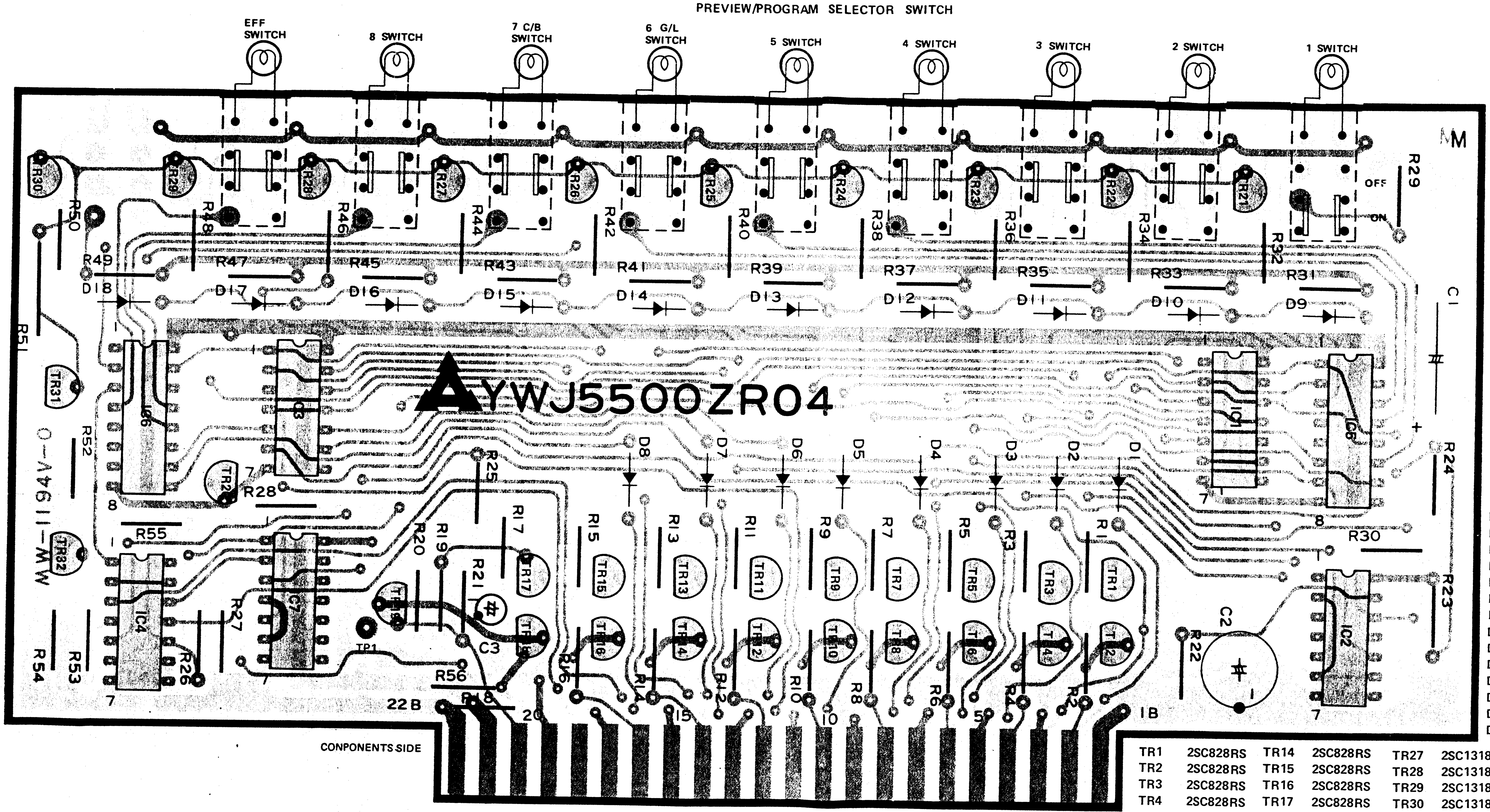

1A/GND
1B/GND
2A/TALLY 1
2B/VIDEO 1
3A/V.I. PULSE
3B/GND
4A/TALLY 2
4B/VIDEO 2
5A/PROGRAM AUX.CONT
5B/GND
6A/TALLY 3
6B/VIDEO 3
7A/PRE/AUX CONT
7B/GND
8A/TALLY 4
8B/VIDEO 4
9A/GND
9B/GND
10A/TALLY 5
10B/VIDEO 5
11A/CUT SW
11B/GND
12A/TALLY 6
12B/VIDEO 6
13A/GEN LOCK ON/OFF
13B/GND
14A/TALLY 7
14B/VIDEO 7
15A/C.B-VIDEO CONT
15B/GND
16A/TALLY 8
16B/VIDEO 8
17A/EFFECT CONT
17B/GND
18A/AB-CONT
18B
19A/C-6
19B/GND
20A/CUT CONT
20B/LINE OUT
21A/+12V IN
21B/+12V IN
22A/GND
22B/GND
C2 220μ16V
IC1
IC2
IC3
IC4
MC14081
MC14073
MC14011
IC5 MC14174
IC6 MC14175
IC7 MC14013
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9 (EFF)
SW10 (AUX)
INPUT 1
INPUT 2
INPUT 3
INPUT 4
INPUT 5
INPUT 6 G/L
INPUT 7 C/B
INPUT 8
EFF
TP1
(0)–AUX SW ON
(1.0)–EFF SW ON
(4.5)–1~8 SW ON
(0)–AUX SW ON
(0.4)–EFF SW ON
(3.8)–1~8 SW ON
( )–1 SW ON
WITH SIGNAL
R51 180(½W)
D1~D18 MA162
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

D1	MA162	I–4
D2	MA162	H–4
D3	MA162	H–4
D4	MA162	G–4
D5	MA162	F–4
D6	MA162	F–4
D7	MA162	E–4
D8	MA162	D–4
D9	MA162	I–7
D10	MA162	H–7
D11	MA162	G–7
D12	MA162	G–7
D13	MA162	F–7
D14	MA162	F–7
D15	MA162	E–7
D16	MA162	D–7
D17	MA162	D–7
D18	MA162	C–7

TR1	2SC828RS	H–4
TR2	2SC828RS	H–3
TR3	2SC828RS	H–4
TR4	2SC828RS	H–3
TR5	2SC828RS	G–4
TR6	2SC828RS	G–3
TR7	2SC828RS	G–4
TR8	2SC828RS	G–3
TR9	2SC828RS	F–4
TR10	2SC828RS	F–3
TR11	2SC828RS	E–4
TR12	2SC828RS	E–3
TR13	2SC828RS	D–4
TR14	2SC828RS	D–3
TR15	2SC828RS	D–4
TR16	2SC828RS	D–3
TR17	2SC828RS	C–4
TR18	2SC828RS	C–3
TR19	2SC828RS	C–4
TR20	2SC828RS	B–3
TR21	2SC1318QR	H–8
TR22	2SC1318QR	H–8
TR23	2SC1318QR	G–8
TR24	2SC1318QR	G–8
TR25	2SC1318QR	F–8
TR26	2SC1318QR	E–8
TR27	2SC1318QR	D–8
TR28	2SC1318QR	D–8
TR29	2SC1318QR	C–8
TR30	2SC1318QR	B–8
TR31	2SC1318QR	B–8
TR32	2SC828RS	A–7

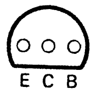
IC1	YWMC14081BCP	A~I–4
IC2	YWMC14081BCP	H~G–4
IC3	YWMC14073BCP	F~D–4
IC4	YWMC14011BCP	D~A–4~7
IC5	YWMC14174BCP	I~F–6
IC6	YWMC14175BCP	E~C–6
IC7	YWMC14013BCP	B–5

CONDUCTOR VIEW OF YWJ5500EZK04
(VIDEO CROSS POINT-2 CIRCUIT BOARD)


PREVIEW/PROGRAM SELECTOR SWITCH
EFF SWITCH
8 SWITCH
7 C/B SWITCH
6 G/L SWITCH
5 SWITCH
4 SWITCH
3 SWITCH
2 SWITCH
1 SWITCH
OFF
ON
M
YWJ5500ZR04
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R35
R36
R37
R38
R39
R40
R41
R42
R43
R44
R45
R46
R47
R48
R49
R50
R51
R52
R53
R54
R55
R56
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
D18
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
TR13
TR14
TR15
TR16
TR17
TR18
TR19
TR20
TR21
TR22
TR23
TR24
TR25
TR26
TR27
TR28
TR29
TR30
TR31
TR32
IC1
IC2
IC3
IC4
IC5
IC6
IC7
C1
C2
C3
TP1
1B
5
10
15
20
22B
7
8
CONPONENTS SIDE

D1	MA162
D2	MA162
D3	MA162
D4	MA162
D5	MA162
D6	MA162
D7	MA162
D8	MA162
D9	MA162
D10	MA162
D11	MA162
D12	MA162
D13	MA162
D14	MA162
D15	MA162
D16	MA162
D17	MA162
D18	MA162

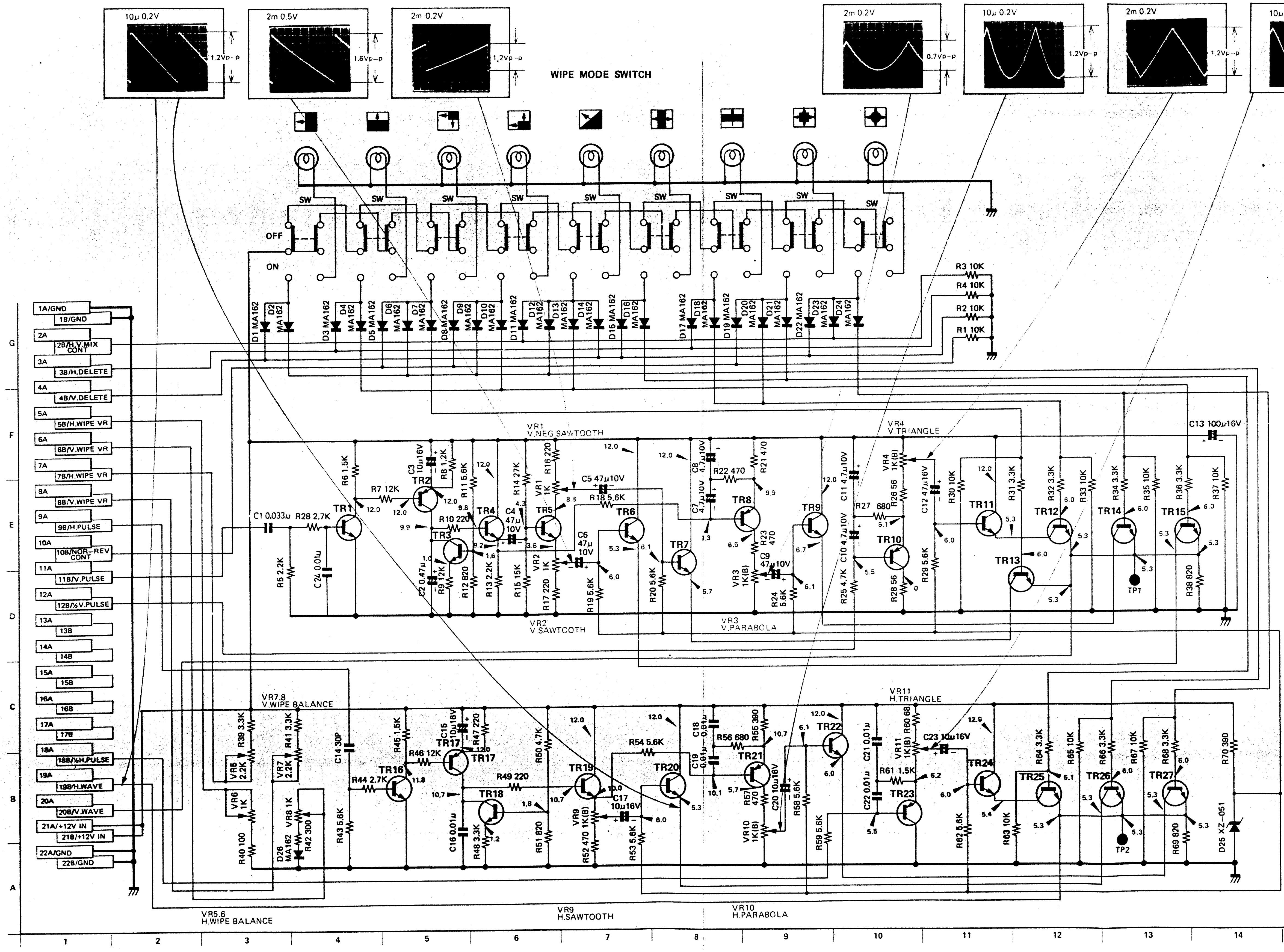
(Top View)



All Transistors

TR1	2SC828RS	TR14	2SC828RS	TR27	2SC1318QR
TR2	2SC828RS	TR15	2SC828RS	TR28	2SC1318QR
TR3	2SC828RS	TR16	2SC828RS	TR29	2SC1318QR
TR4	2SC828RS	TR17	2SC828RS	TR30	2SC1318QR
TR5	2SC828RS	TR18	2SC828RS	TR31	2SC1318QR
TR6	2SC828RS	TR19	2SC828RS	TR32	2SC828RS
TR7	2SC828RS	TR20	2SC828RS	IC1	YWMC14081BCP
TR8	2SC828RS	TR21	2SC1318QR	IC2	YWMC14081BCP
TR9	2SC828RS	TR22	2SC1318QR	IC3	YWMC14073BCP
TR10	2SC828RS	TR23	2SC1318QR	IC4	YWMC14011BCP
TR11	2SC828RS	TR24	2SC1318QR	IC5	YWMC14174BCP
TR12	2SC828RS	TR25	2SC1318QR	IC6	YWMC14175BCP
TR13	2SC828RS	TR26	2SC1318QR	IC7	YWMC14013BCP

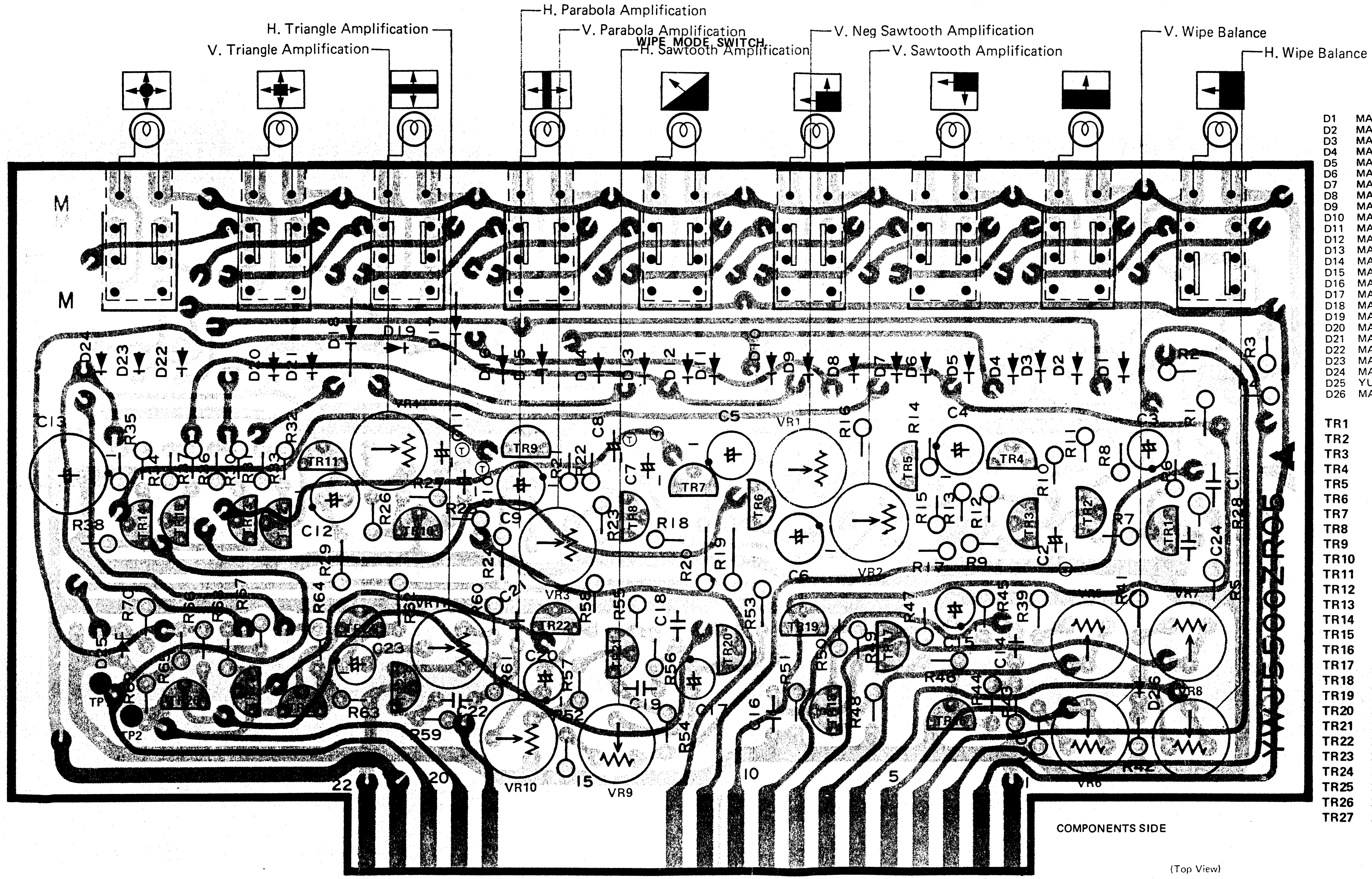
SCHEMATIC DIAGRAM OF WAVEFORM GENERATOR CIRCUIT BOARD (YWJ5500ZK05)


10μ 0.2V
1.2Vp-p
2m 0.5V
1.6Vp-p
2m 0.2V
1.2Vp-p
WIPE MODE SWITCH
2m 0.2V
0.7Vp-p
10μ 0.2V
1.2Vp-p
2m 0.2V
1.2Vp-p
10μ 0.2V
1.2Vp-p
SW
OFF
ON
1A/GND
1B/GND
2A
2B/H.V.MIX CONT
3A
3B/H.DELETE
4A
4B/V.DELETE
5A
5B/H.WIPE VR
6A
6B/V.WIPE VR
7A
7B/H.WIPE VR
8A
8B/V.WIPE VR
9A
9B/H.PULSE
10A
10B/NOR-REV CONT
11A
11B/V.PULSE
12A
12B/½V.PULSE
13A
13B
14A
14B
15A
15B
16A
16B
17A
17B
18A
18B/½H.PULSE
19A
19B/H.WAVE
20A
20B/V.WAVE
21A/+12V IN
21B/+12V IN
22A/GND
22B/GND
VR1 V.NEG SAWTOOTH
VR2 V.SAWTOOTH
VR3 V.PARABOLA
VR4 V.TRIANGLE
VR7,8 V.WIPE BALANCE
VR5,6 H.WIPE BALANCE
VR9 H.SAWTOOTH
VR10 H.PARABOLA
VR11 H.TRIANGLE
TP1
TP2
C13 100μ16V
R1 10K
R2 10K
R3 10K
R4 10K
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11
12
13
14

D1	MA162	G-3
D2	MA162	G-3
D3	MA162	G-4
D4	MA162	G-4
D5	MA162	G-4
D6	MA162	G-5 D7
D7	MA162	G-5
D8	MA162	G-5
D9	MA162	G-6
D10	MA162	G-6
D11	MA162	G-6
D12	MA162	G-6
D13	MA162	G-7
D14	MA162	G-7
D15	MA162	G-7
D16	MA162	G-7
G17	MA162	G-8
D18	MA162	G-8
D19	MA162	G-8
D20	MA162	G-9
D21	MA162	G-9
D22	MA162	G-9
D23	MA162	G-10
D24	MA162	G-10
D25	XZ-051	B-14
D26	MA162	A-4

TR1	**2SC828RS**	**E-4**
TR2	**2SA564RS**	**E-5**
TR3	**2SC828RS**	**E-5**
TR4	**2SC828RS**	**E-6**
TR5	**2SC828RS**	**E-6**
TR6	**2SC828RS**	**E-7**
TR7	**2SC828RS**	**E-8**
TR8	**2SA564RS**	**E-9**
TR9	**2SC828RS**	**E-9**
TR10	**2SA564RS**	**E-10**
TR11	**2SC828RS**	**E-11**
TR12	**2SC828RS**	**E-12**
TR13	**2SC828RS**	**D-12**
TR14	**2SC828RS**	**E-13**
TR15	**2SC828RS**	**E-13**
TR16	**2SC828RS**	**B-5**
TR17	**2SA564RS**	**B-5**
TR18	**2SC828RS**	**B-6**
TR19	**2SC828RS**	**B-7**
TR20	**2SC828RS**	**B-8**
TR21	**2SA564RS**	**B-9**
TR22	**2SC828RS**	**C-10**
TR23	**2SA564RS**	**B-10**
TR24	**2SC828RS**	**B-11**
TR25	**2SC828RS**	**B-12**
TR26	**2SC828RS**	**B-13**
TR27	**2SC828RS**	**B-13**

CONDUCTOR VIEW OF YWJ5500ZK05
(WAVEFORM GENERATOR CIRCUIT BOARD)

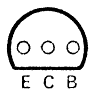

H. Parabola Amplification
H. Triangle Amplification
V. Triangle Amplification
V. Parabola Amplification
WIPE MODE SWITCH
H. Sawtooth Amplification
V. Neg Sawtooth Amplification
V. Sawtooth Amplification
V. Wipe Balance
H. Wipe Balance
M
M
YWJ5500ZK05
TP1
TP2
22
20
15
10
5
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
VR9
VR10
VR11

D1	MA162
D2	MA162
D3	MA162
D4	MA162
D5	MA162
D6	MA162
D7	MA162
D8	MA162
D9	MA162
D10	MA162
D11	MA162
D12	MA162
D13	MA162
D14	MA162
D15	MA162
D16	MA162
D17	MA162
D18	MA162
D19	MA162
D20	MA162
D21	MA162
D22	MA162
D23	MA162
D24	MA162
D25	YUDXZ–051
D26	MA162

TR1	2SC828RS
TR2	2SA564RS
TR3	2SC828RS
TR4	2SC828RS
TR5	2SC828RS
TR6	2SC828RS
TR7	2SC828RS
TR8	2SA564RS
TR9	2SC828RS
TR10	2SA564RS
TR11	2SC828RS
TR12	2SC828RS
TR13	2SC828RS
TR14	2SC828RS
TR15	2SC828RS
TR16	2SC828RS
TR17	2SA564RS
TR18	2SC828RS
TR19	2SC828RS
TR20	2SC828RS
TR21	2SA564RS
TR22	2SC828RS
TR23	2SA564RS
TR24	2SC828RS
TR25	2SC828RS
TR26	2SC828RS
TR27	2SC828RS

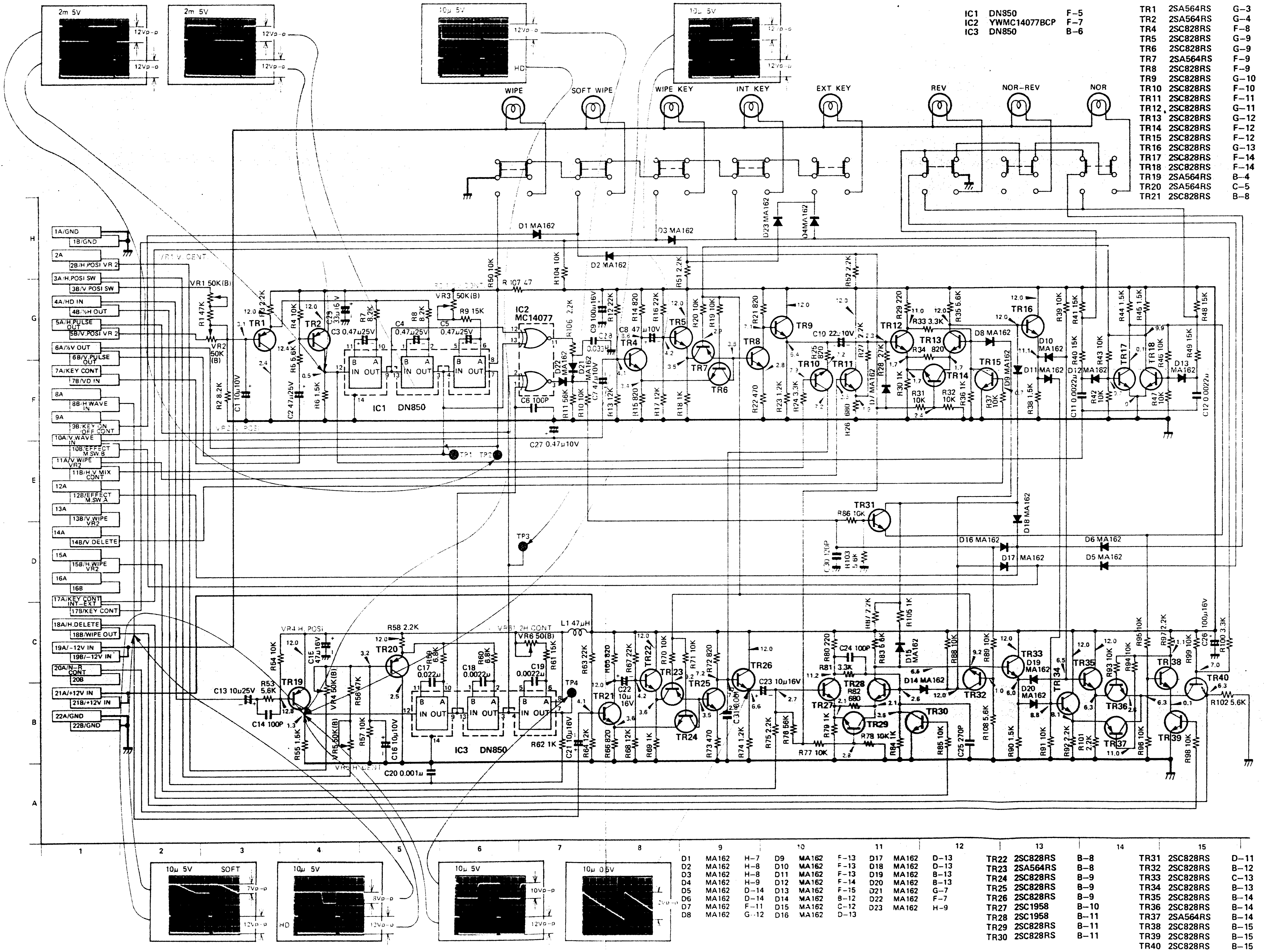
COMPONENTS SIDE

(Top View)



All Transistors

SCHEMATIC DIAGRAM OF WAVEFORM PROCESSOR/POSITIONER CIRCUIT BOARD (YWJ5500ZK06)


2m 5V
12Vp-p
10μ 5V
HD
WIPE
SOFT WIPE
WIPE KEY
INT KEY
EXT KEY
REV
NOR-REV
NOR
1A/GND
1B/GND
2A
2B/H.POSI VR 2
3A/H.POSI SW
3B/V.POSI SW
4A/HD IN
4B/½H OUT
5A/H.PULSE OUT
5B/V.POSI VR 2
6A/½V OUT
6B/V.PULSE OUT
7A/KEY CONT
7B/VD IN
8A
8B/H.WAVE IN
9A
9B/KEY ON /OFF CONT
10A/V.WAVE IN
10B/EFFECT M.SW.B
11A/V.WIPE VR2
11B/H.V MIX CONT
12A
12B/EFFECT M.SW.A
13A
13B/V.WIPE VR2
14A
14B/V.DELETE
15A
15B/H.WIPE VR2
16A
16B
17A/KEY CONT INT-EXT
17B/KEY CONT
18A/H.DELETE
18B/WIPE OUT
19A/-12V IN
19B/-12V IN
20A/N-R CONT
20B
21A/+12V IN
21B/+12V IN
22A/GND
22B/GND
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
VR1 V.CENT
VR1 50K(B)
VR2 50K (B)
VR3 50K(B)
VR4 H.POSI
VR5 50K(B)
VR6 50(B)
VR6 H.CENT
IC1 DN850
IC2 MC14077
IC3 DN850
L1 47μH
TP1
TP2
TP3
TP4
TR1
TR2
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
TR13
TR14
TR15
TR16
TR17
TR18
TR19
TR20
TR21
TR22
TR23
TR24
TR25
TR26
TR27
TR28
TR29
TR30
TR31
TR32
TR33
TR34
TR35
TR36
TR37
TR38
TR39
TR40
D1 MA162
D2 MA162
D3 MA162
D23 MA162
D4 MA162
D16 MA162
D17 MA162
D6 MA162
D5 MA162
D18 MA162
C27 0.47μ10V
C20 0.001μ
10μ 5V SOFT
7Vp-p
12Vp-p
3Vp-p
10Vp-p
10μ 0.5V
2Vp-p

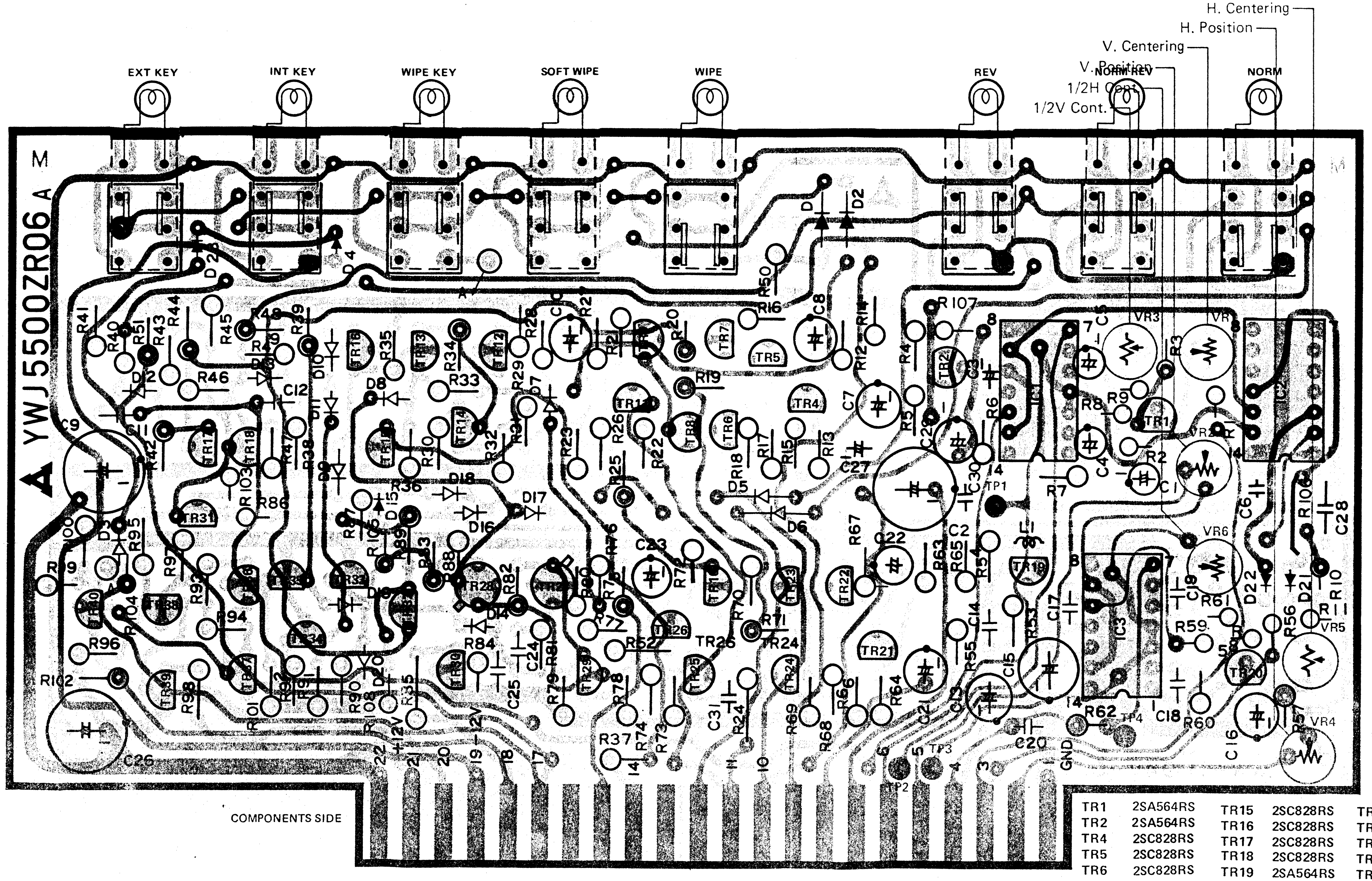
IC1	DN850	F-5
IC2	YWMC14077BCP	F-7
IC3	DN850	B-6

TR1	2SA564RS	G-3
TR2	2SA564RS	G-4
TR4	2SC828RS	F-8
TR5	2SC828RS	G-9
TR6	2SC828RS	G-9
TR7	2SA564RS	F-9
TR8	2SC828RS	F-9
TR9	2SC828RS	G-10
TR10	2SC828RS	F-10
TR11	2SC828RS	F-11
TR12	2SC828RS	G-11
TR13	2SC828RS	G-12
TR14	2SC828RS	F-12
TR15	2SC828RS	F-12
TR16	2SC828RS	G-13
TR17	2SC828RS	F-14
TR18	2SC828RS	F-14
TR19	2SA564RS	B-4
TR20	2SA564RS	C-5
TR21	2SC828RS	B-8

D1	MA162	H-7
D2	MA162	H-8
D3	MA162	H-8
D4	MA162	H-9
D5	MA162	D-14
D6	MA162	D-14
D7	MA162	F-11
D8	MA162	G-12
D9	MA162	F-13
D10	MA162	F-13
D11	MA162	F-13
D12	MA162	F-14
D13	MA162	F-15
D14	MA162	B-12
D15	MA162	C-12
D16	MA162	D-13
D17	MA162	D-13
D18	MA162	D-13
D19	MA162	B-13
D20	MA162	B-13
D21	MA162	G-7
D22	MA162	F-7
D23	MA162	H-9

TR22	2SC828RS	B-8
TR23	2SA564RS	B-8
TR24	2SC828RS	B-9
TR25	2SC828RS	B-9
TR26	2SC828RS	B-9
TR27	2SC1958	B-10
TR28	2SC1958	B-11
TR29	2SC828RS	B-11
TR30	2SC828RS	B-11
TR31	2SC828RS	D-11
TR32	2SC828RS	B-12
TR33	2SC828RS	C-13
TR34	2SC828RS	B-13
TR35	2SC828RS	B-14
TR36	2SC828RS	B-14
TR37	2SA564RS	B-14
TR38	2SC828RS	B-15
TR39	2SC828RS	B-15
TR40	2SC828RS	B-15

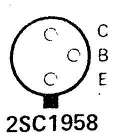
CONDUCTOR VIEW OF YWJ5500ZK06
(WAVEFORM PROCESSOR/POSITIONER CIRCUIT BOARD)


H. Centering
H. Position
V. Centering
V. Position
1/2H Cont.
1/2V Cont.
EXT KEY
INT KEY
WIPE KEY
SOFT WIPE
WIPE
REV
NORM-REV
NORM
YWJ5500ZR06 A
M
VR1
VR2
VR3
VR4
VR5
VR6
IC1
IC2
IC3
TP1
TP2
TP3
TP4
GND
+12V
COMPONENTS SIDE

IC1	DN850
IC2	YWMC14077BCP
IC3	DN850

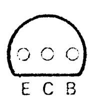
D1	MA162
D2	MA162
D3	MA162
D4	MA162
D5	MA162
D6	MA162
D7	MA162
D8	MA162
D9	MA162
D10	MA162
D11	MA162
D12	MA162
D13	MA162
D14	MA162
D15	MA162
D16	MA162
D17	MA162
D18	MA162
D19	MA162
D20	MA162
D21	MA162
D22	MA162
D23	MA162

(Top View)



2SC1958

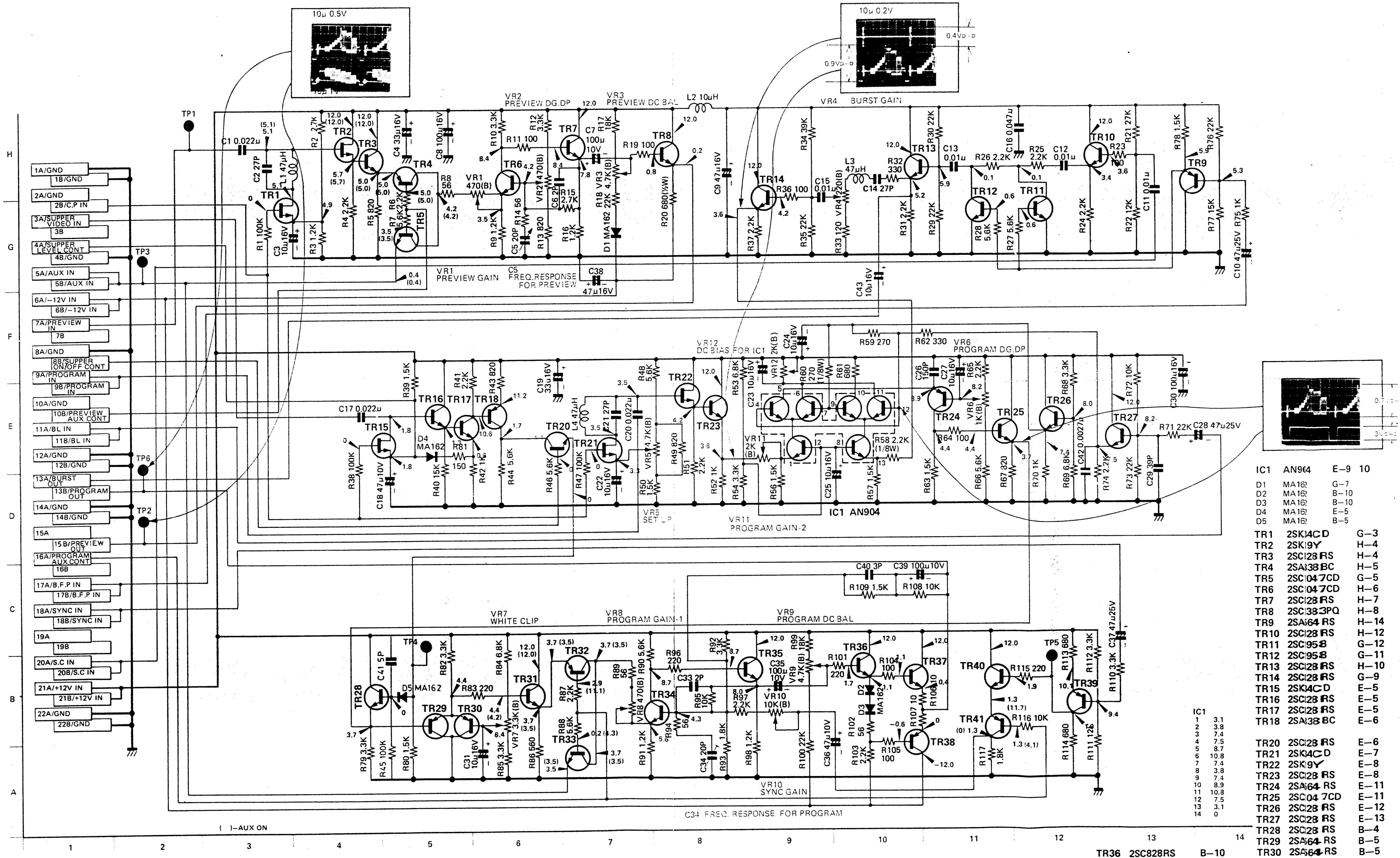
(Top View)



Other Transistors

TR1	2SA564RS	TR15	2SC828RS	TR29	2SC828RS
TR2	2SA564RS	TR16	2SC828RS	TR30	2SC828RS
TR4	2SC828RS	TR17	2SC828RS	TR31	2SC828RS
TR5	2SC828RS	TR18	2SC828RS	TR32	2SC828RS
TR6	2SC828RS	TR19	2SA564RS	TR33	2SC828RS
TR7	2SA564RS	TR20	2SA564RS	TR34	2SC828RS
TR8	2SC828RS	TR21	2SC828RS	TR35	2SC828RS
TR9	2SC828RS	TR22	2SC828RS	TR36	2SC828RS
TR10	2SC828RS	TR23	2SA564RS	TR37	2SA564RS
TR11	2SC828RS	TR24	2SC828RS	TR38	2SC828RS
TR12	2SC828RS	TR25	2SC828RS	TR39	2SC828RS
TR13	2SC828RS	TR26	2SC828RS	TR40	2SC828RS
TR14	2SC828RS	TR27	2SC1958		
		TR28	2SC1958		

SCHEMATIC DIAGRAM OF PREVIEW . PROGRAM OUTPUT
CIRCUIT BOARD (YWJ5500EZK07)


10μ 0.5V
10μ 0.2V
0.4Vp-p
0.9Vp-p
3Vp-p
1A/GND
1B/GND
2A/GND
2B/C.P IN
3A/SUPPER VIDEO IN
3B
4A/SUPPER LEVEL CONT
4B/GND
5A/AUX IN
5B/AUX IN
6A/−12V IN
6B/−12V IN
7A/PREVIEW IN
7B
8A/GND
8B/SUPPER ON/OFF CONT
9A/PROGRAM IN
9B/PROGRAM IN
10A/GND
10B/PREVIEW AUX CONT
11A/BL IN
11B/BL IN
12A/GND
12B/GND
13A/BURST OUT
13B/PROGRAM OUT
14A/GND
14B/GND
15A
15B/PREVIEW OUT
16A/PROGRAM AUX CONT
16B
17A/B.F.P IN
17B/B.F.P IN
18A/SYNC IN
18B/SYNC IN
19A
19B
20A/S.C IN
20B/S.C IN
21A/+12V IN
21B/+12V IN
22A/GND
22B/GND
TP1
TP2
TP3
TP4
TP5
TP6
VR1 PREVIEW GAIN
C5 FREQ.RESPONSE FOR PREVIEW
VR2 PREVIEW DG.DP
VR3 PREVIEW DC BAL
L2 10μH
VR4 BURST GAIN
VR5 SET UP
VR6 PROGRAM DG.DP
VR7 WHITE CLIP
VR8 PROGRAM GAIN-1
VR9 PROGRAM DC BAL
VR10 SYNC GAIN
VR11 PROGRAM GAIN-2
VR12 DC BIAS FOR IC1
C34 FREQ. RESPONSE FOR PROGRAM
IC1 AN904
( )–AUX ON
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14

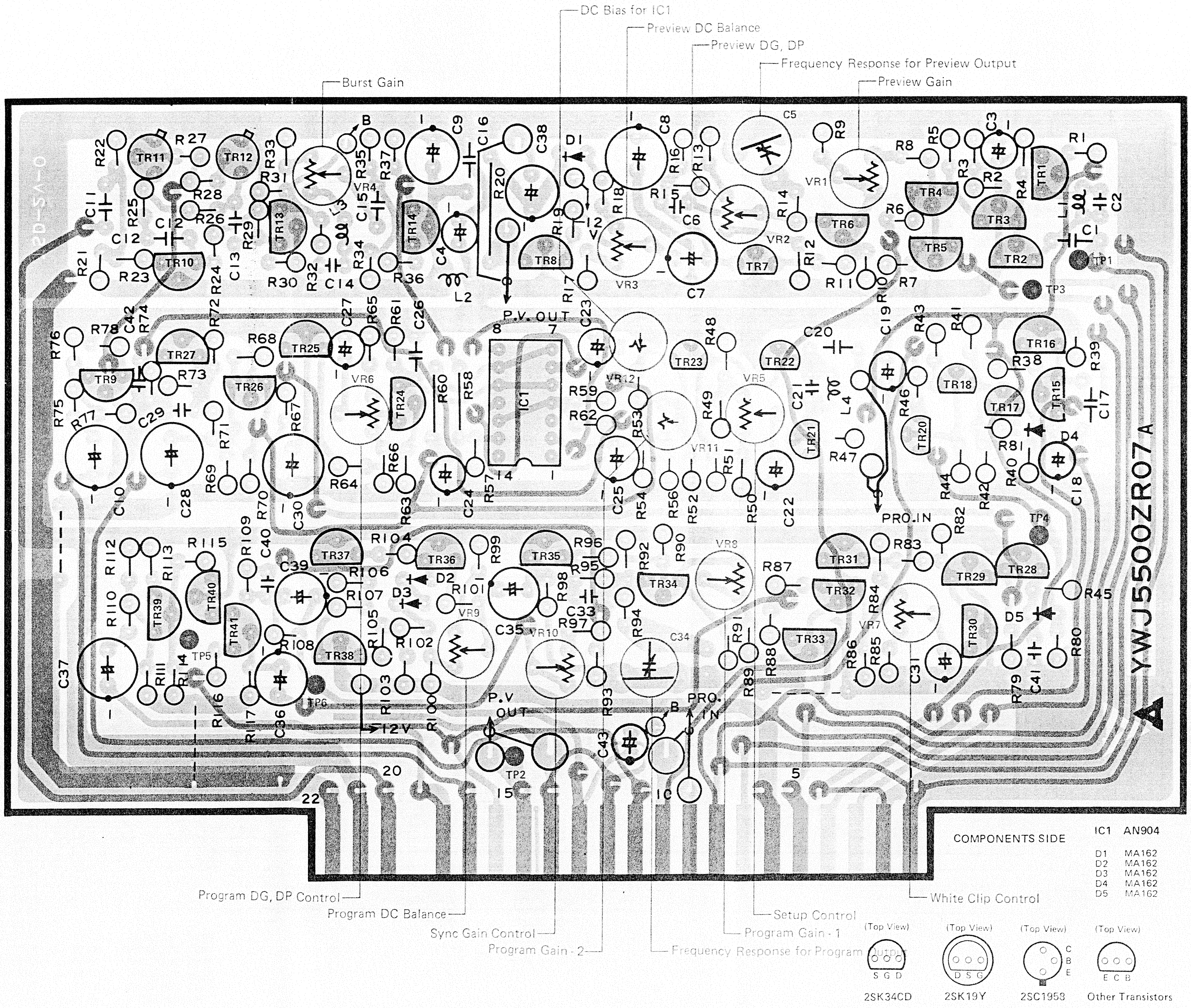
IC1	AN904	E–9	10
D1	MA162	G–7	
D2	MA162	B–10	
D3	MA162	B–10	
D4	MA162	E–5	
D5	MA162	B–5	

TR1	2SK34CD	G–3
TR2	2SK19Y	H–4
TR3	2SC828RS	H–4
TR4	2SA838BC	H–5
TR5	2SC1047CD	G–5
TR6	2SC1047CD	H–6
TR7	2SC828RS	H–7
TR8	2SC1383PQ	H–8
TR9	2SA564RS	H–14
TR10	2SC828RS	H–12
TR11	2SC1958	G–12
TR12	2SC1958	G–11
TR13	2SC828RS	H–10
TR14	2SC828RS	G–9
TR15	2SK34CD	E–5
TR16	2SC828RS	E–5
TR17	2SC828RS	E–5
TR18	2SA838BC	E–6
TR20	2SC828RS	E–6
TR21	2SK34CD	E–7
TR22	2SK19Y	E–8
TR23	2SC828RS	E–8
TR24	2SA564RS	E–11
TR25	2SC1047CD	E–11
TR26	2SC828RS	E–12
TR27	2SC828RS	E–13
TR28	2SC828RS	B–4
TR29	2SA564RS	B–5
TR30	2SA564RS	B–5
TR31	2SC828RS	B–6
TR32	2SA838BC	B–7
TR33	2SC1047CD	A–7
TR34	2SC1047CD	B–8
TR35	2SC828RS	B–9

IC1	
1	3.1
2	3.8
3	7.4
4	7.5
5	8.7
6	10.8
7	7.4
8	3.8
9	7.4
10	8.9
11	10.8
12	7.5
13	3.1
14	0

TR36	2SC828RS	B–10
TR37	2SC1383PQ	B–10
TR38	2SA683PQ	A–10
TR39	2SA564RS	B–12
TR40	2SC828RS	B–11
TR41	2SA564RS	B–11

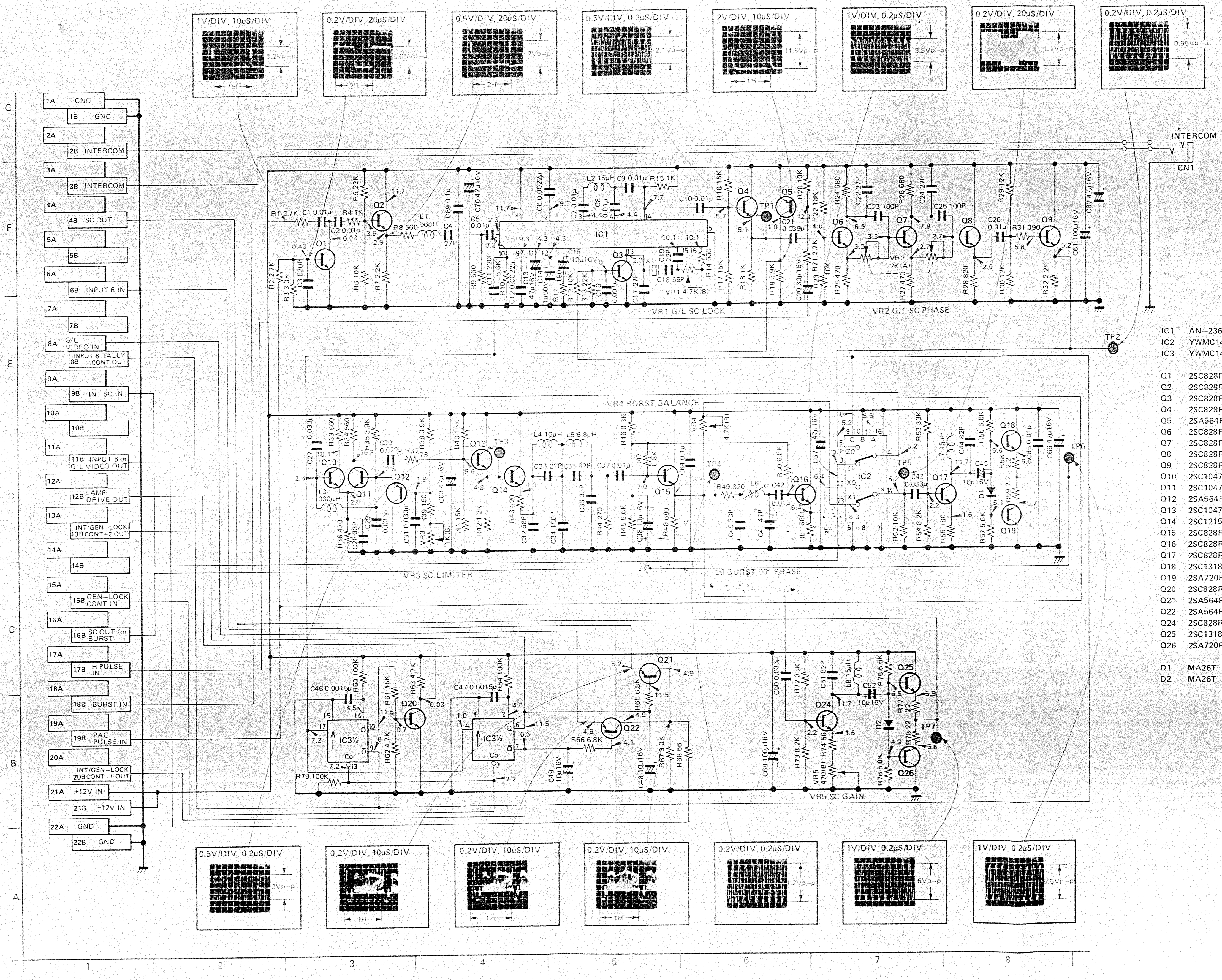
CONDUCTOR VIEW OF YWJ5500EZK07
(PREVIEW . PROGRAM OUTPUT CIRCUIT BOARD)


DC Bias for IC1
Preview DC Balance
Preview DG, DP
Frequency Response for Preview Output
Preview Gain
Burst Gain
YWJ5500ZR07A
P.V. OUT
PRO. IN
+12V
TP1
TP2
TP3
TP4
TP5
TP6
IC1
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
VR9
VR10
VR11
VR12
COMPONENTS SIDE
Program DG, DP Control
Program DC Balance
Sync Gain Control
Program Gain - 2
Frequency Response for Program Output
Program Gain - 1
Setup Control
White Clip Control
(Top View)
S G D
2SK34CD
(Top View)
D S G
2SK19Y
(Top View)
C
B
E
2SC1958
(Top View)
E C B
Other Transistors

IC1	AN904
D1	MA162
D2	MA162
D3	MA162
D4	MA162
D5	MA162

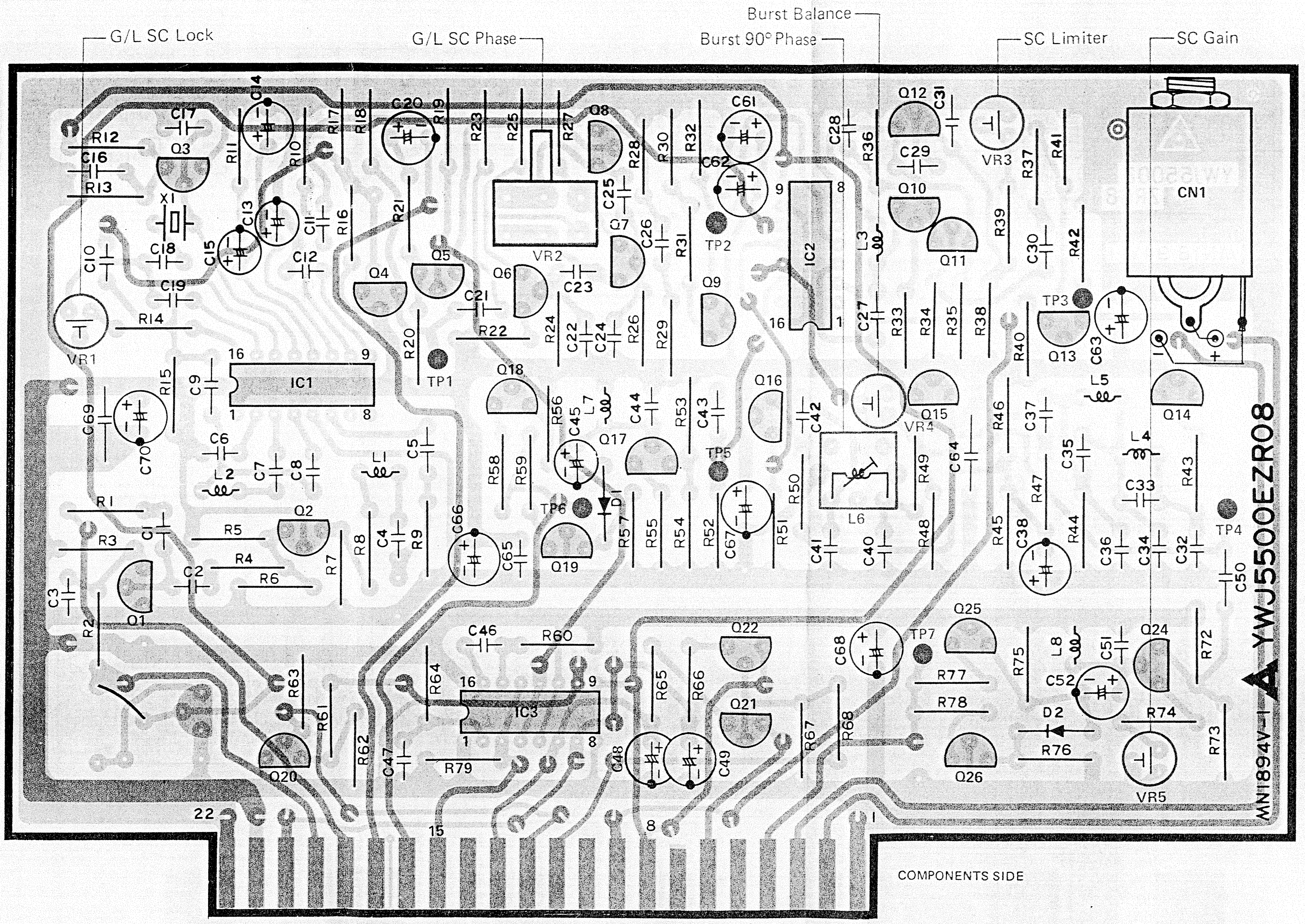
TR1	2SK34CD
TR2	2SK19Y
TR3	2SC828RS
TR4	2SA838BC
TR5	2SC1047CD
TR6	2SC1047CD
TR7	2SC828RS
TR8	2SC1383PQ
TR9	2SA564RS
TR10	2SC828RS
TR11	2SC1958
TR12	2SC1958
TR13	2SC828RS
TR14	2SC828RS
TR15	2SK34CD
TR16	2SC828RS
TR17	2SC828RS
TR18	2SA838BC
TR20	2SC828RS
TR21	2SK34CD
TR22	2SK19Y
TR23	2SC828RS
TR24	2SA564RS
TR25	2SC1047CD
TR26	2SC828RS
TR27	2SC828RS
TR28	2SC828RS
TR29	2SA564RS
TR30	2SA564RS
TR31	2SC828RS
TR32	2SA838CD
TR33	2SC1047CD
TR34	2SC1047CD
TR35	2SC828RS
TR36	2SC828RS
TR37	2SC1383PQ
TR38	2SA683PQ
TR39	2SA564RS
TR40	2SC828RS
TR41	2SA564RS

SCHEMATIC DIAGRAM OF SUBCARRIER CIRCUIT BOARD (YWJ5500EZK08)


1V/DIV, 10µS/DIV
0.2V/DIV, 20µS/DIV
0.5V/DIV, 20µS/DIV
0.5V/DIV, 0.2µS/DIV
2V/DIV, 10µS/DIV
1V/DIV, 0.2µS/DIV
0.2V/DIV, 20µS/DIV
0.2V/DIV, 0.2µS/DIV
3.2Vp-p
0.65Vp-p
2Vp-p
2.1Vp-p
11.5Vp-p
3.5Vp-p
1.1Vp-p
0.95Vp-p
1H
2H
1A GND
1B GND
2A
2B INTERCOM
3A
3B INTERCOM
4A
4B SC OUT
5A
5B
6A
6B INPUT 6 IN
7A
7B
8A G/L VIDEO IN
8B INPUT 6 TALLY CONT OUT
9A
9B INT SC IN
10A
10B
11A
11B INPUT 6 or G/L VIDEO OUT
12A
12B LAMP DRIVE OUT
13A
13B INT/GEN-LOCK CONT-2 OUT
14A
14B
15A
15B GEN-LOCK CONT IN
16A
16B SC OUT for BURST
17A
17B H.PULSE IN
18A
18B BURST IN
19A
19B PAL PULSE IN
20A
20B INT/GEN-LOCK CONT-1 OUT
21A +12V IN
21B +12V IN
22A GND
22B GND
INTERCOM
CN1
IC1
IC2
IC3½
TP1
TP2
TP3
TP4
TP5
TP6
TP7
VR1 G/L SC LOCK
VR2 G/L SC PHASE
VR3 SC LIMITER
VR4 BURST BALANCE
L6 BURST 90° PHASE
VR5 SC GAIN
0.5V/DIV, 0.2µS/DIV
0.2V/DIV, 10µS/DIV
0.2V/DIV, 10µS/DIV
0.2V/DIV, 10µS/DIV
0.2V/DIV, 0.2µS/DIV
1V/DIV, 0.2µS/DIV
1V/DIV, 0.2µS/DIV
2Vp-p
1.2Vp-p
6Vp-p
5.5Vp-p
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8

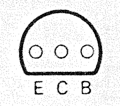
IC1	AN-236	F-5
IC2	YWMC14053BCP	D-7
IC3	YWMC14528BCP	B-3, 4
Q1	2SC828RS	F-3
Q2	2SC828RS	F-3
Q3	2SC828RS	F-5
Q4	2SC828RS	F-6
Q5	2SA564RS	F-6
Q6	2SC828RS	F-7
Q7	2SC828RS	F-7
Q8	2SC828RS	F-8
Q9	2SC828RS	F-8
Q10	2SC1047CD	D-3
Q11	2SC1047CD	D-3
Q12	2SA564RS	D-3
Q13	2SC1047CD	D-4
Q14	2SC1215ST	D-4
Q15	2SC828RS	D-5
Q16	2SC828RS	D-6
Q17	2SC828RS	D-7
Q18	2SC1318RS	D-8
Q19	2SA720RS	D-8
Q20	2SC828RS	B-3
Q21	2SA564RS	B-5
Q22	2SA564RS	C-5
Q24	2SC828RS	B-7
Q25	2SC1318RS	B-7
Q26	2SA720RS	C-7
D1	MA26T	D-8
D2	MA26T	B-7

CONDUCTOR VIEW OF YWJ5500EZK08
(SUBCARRIER CIRCUIT BOARD)


G/L SC Lock
G/L SC Phase
Burst Balance
Burst 90° Phase
SC Limiter
SC Gain
VR1
VR2
VR3
VR4
VR5
IC1
IC2
IC3
CN1
TP1
TP2
TP3
TP4
TP5
TP6
TP7
X1
L1
L2
L3
L4
L5
L6
L7
L8
D1
D2
22
15
8
1
16
9
YWJ5500EZR08
MN1894V-1
COMPONENTS SIDE

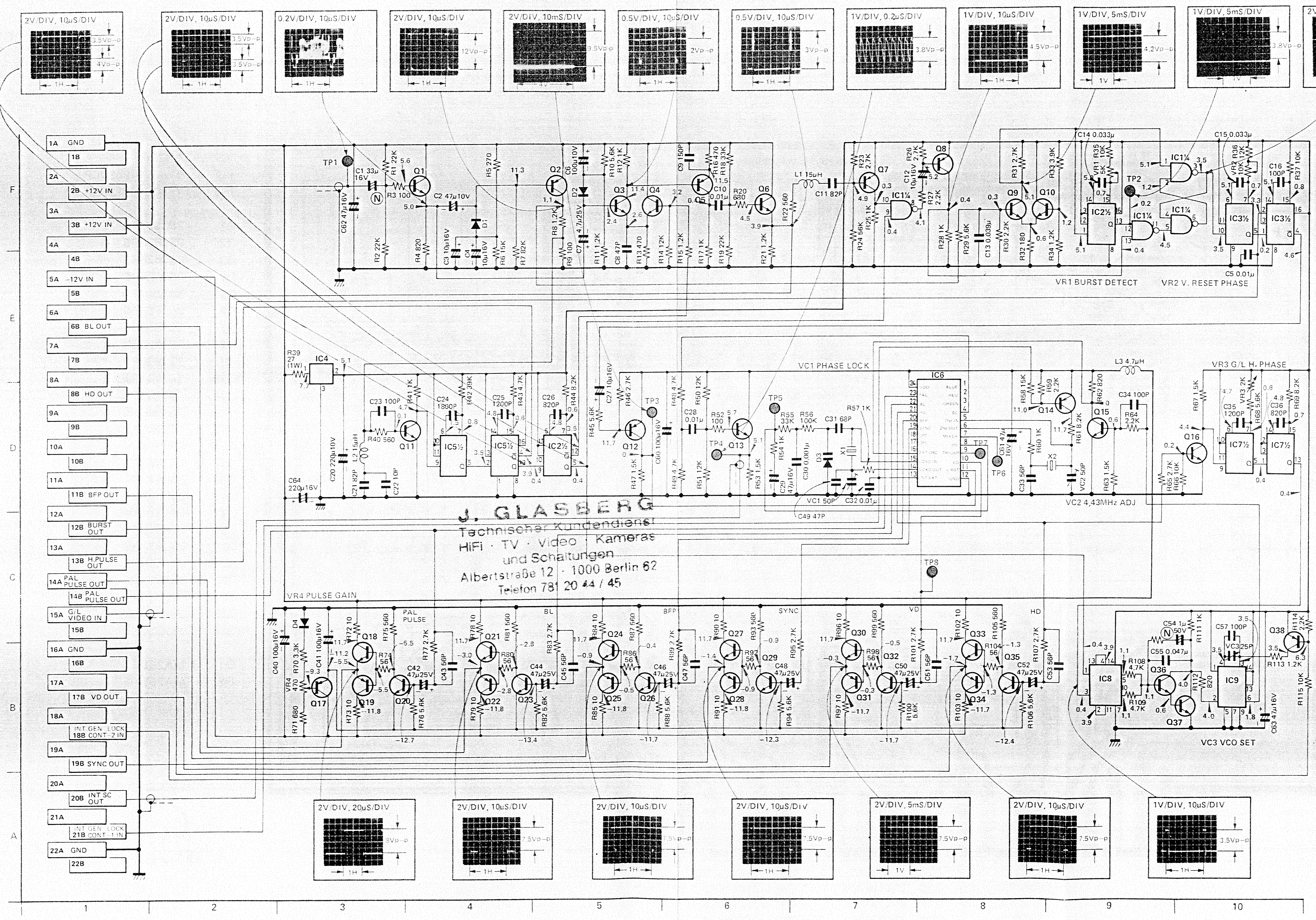
IC1	AN236
IC2	YWMC14053BCP
IC3	YWMC14528BCP
Q1	2SC828RS
Q2	2SC828RS
Q3	2SC828RS
Q4	2SC828RS
Q5	2SA564RS
Q6	2SC828RS
Q7	2SC828RS
Q8	2SC828RS
Q9	2SC828RS
Q10	2SC1047CD
Q11	2SC1047CD
Q12	2SA564RS
Q13	2SC1047CD
Q14	2SC1215ST
Q15	2SC828RS
Q16	2SC828RS
Q17	2SC828RS
Q18	2SC1318RS
Q19	2SA720RS
Q20	2SC828RS
Q21	2SA564RS
Q22	2SA564RS
Q24	2SC828RS
Q25	2SC1318RS
Q26	2SA720RS
D1	MA26T
D2	MA26T

(Top View)



All Transistors

SCHEMATIC DIAGRAM OF SYNC CIRCUIT BOARD (YWJ5500EZK09)


2V/DIV, 10µS/DIV
2V/DIV, 10µS/DIV
0.2V/DIV, 10µS/DIV
2V/DIV, 10µS/DIV
2V/DIV, 10mS/DIV
0.5V/DIV, 10µS/DIV
0.5V/DIV, 10µS/DIV
1V/DIV, 0.2µS/DIV
1V/DIV, 10µS/DIV
1V/DIV, 5mS/DIV
1V/DIV, 5mS/DIV
2V/DIV, 10mS/DIV
1A GND
1B
2A
2B +12V IN
3A
3B +12V IN
4A
4B
5A -12V IN
5B
6A
6B BL OUT
7A
7B
8A
8B HD OUT
9A
9B
10A
10B
11A
11B BFP OUT
12A
12B BURST OUT
13A
13B H.PULSE OUT
14A PAL PULSE OUT
14B PAL PULSE OUT
15A G/L VIDEO IN
15B
16A GND
16B
17A
17B VD OUT
18A
18B INT GEN LOCK CONT-2 IN
19A
19B SYNC OUT
20A
20B INT SC OUT
21A
21B INT GEN LOCK CONT-1 IN
22A GND
22B
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
IC1¼
IC2½
IC3½
IC4
IC5½
IC6
IC7½
IC8
IC9
VR1 BURST DETECT
VR2 V. RESET PHASE
VC1 PHASE LOCK
VR3 G/L H. PHASE
VC2 4.43MHz ADJ
VR4 PULSE GAIN
VC3 VCO SET
PAL PULSE
BL
BFP
SYNC
VD
HD
L1 15µH
L2 15µH
L3 4.7µH
X1
X2
2V/DIV, 20µS/DIV
2V/DIV, 10µS/DIV
2V/DIV, 10µS/DIV
2V/DIV, 10µS/DIV
2V/DIV, 5mS/DIV
2V/DIV, 10µS/DIV
1V/DIV, 10µS/DIV
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

IC1	YWHD74LS00P	F-9
IC2	YWHD74221P	F-9,D-5
IC3	YWHD74LS221P	F-10
IC4	YHSFS-7805M	E-3
IC5	YWHD74LS221P	D-4
IC6	MN6065	D-7,8
IC7	YWHD74221P	D-10
IC8	YW-MC4044P	B-9
IC9	YW-MC4024P	B-10
Q1	2SC828-RS	F-4
Q2	2SA564-RS	F-5
Q3	2SC1047-CD	F-5
Q4	2SC1047-CD	F-5
Q5	2SA564-RS	F-6
Q6	2SC828-RS	F-6
Q7	2SA564-RS	F-7
Q8	2SA564-RS	F-8
Q9	2SC828-RS	F-8
Q10	2SC828-RS	F-8
Q11	2SC828-RS	D-4
Q12	2SA564-RS	D-5
Q13	2SC828-RS	D-6
Q14	2SA564-RS	D-9
Q15	2SC1047-CD	D-9
Q16	2SC828-RS	D-10
Q17	2SA720-RS	B-3
Q18	2SC1318-RS	B-3
Q19	2SA720-RS	B-3
Q20	2SC1047-CD	B-3
Q21	2SC1318-RS	B-4
Q22	2SA720-RS	B-4
Q23	2SC1047-CD	B-4
Q24	2SC1318-RS	B-5
Q25	2SA720-RS	B-5
Q26	2SC1047-CD	B-5
Q27	2SC1318-RS	B-6
Q28	2SA720-RS	B-6
Q29	2SC1047-CD	B-6
Q30	2SC1318-RS	B-7
Q31	2SA720-RS	B-7
Q32	2SC1047-CD	B-7
Q33	2SC1318-RS	B-8
Q34	2SA720-RS	B-8
Q35	2SC1047-CD	B-8
Q36	2SC828-RS	B-9
Q37	2SC828-RS	B-10
Q38	2SA564-RS	B-10
D1	MA162	F-4
D2	OA90	F-5
D3	YUD1S2139C	D-7
D4	MA162	C-3

IC6	
4	11.2
5	10.2
6	0.1
7	11.7
8	0.9
10	0.3
11	0
13	0.5
14	5.4
15	5.7
16	0
19	0.9
20	0.4
21	1.1
22	2.8
23	4.4

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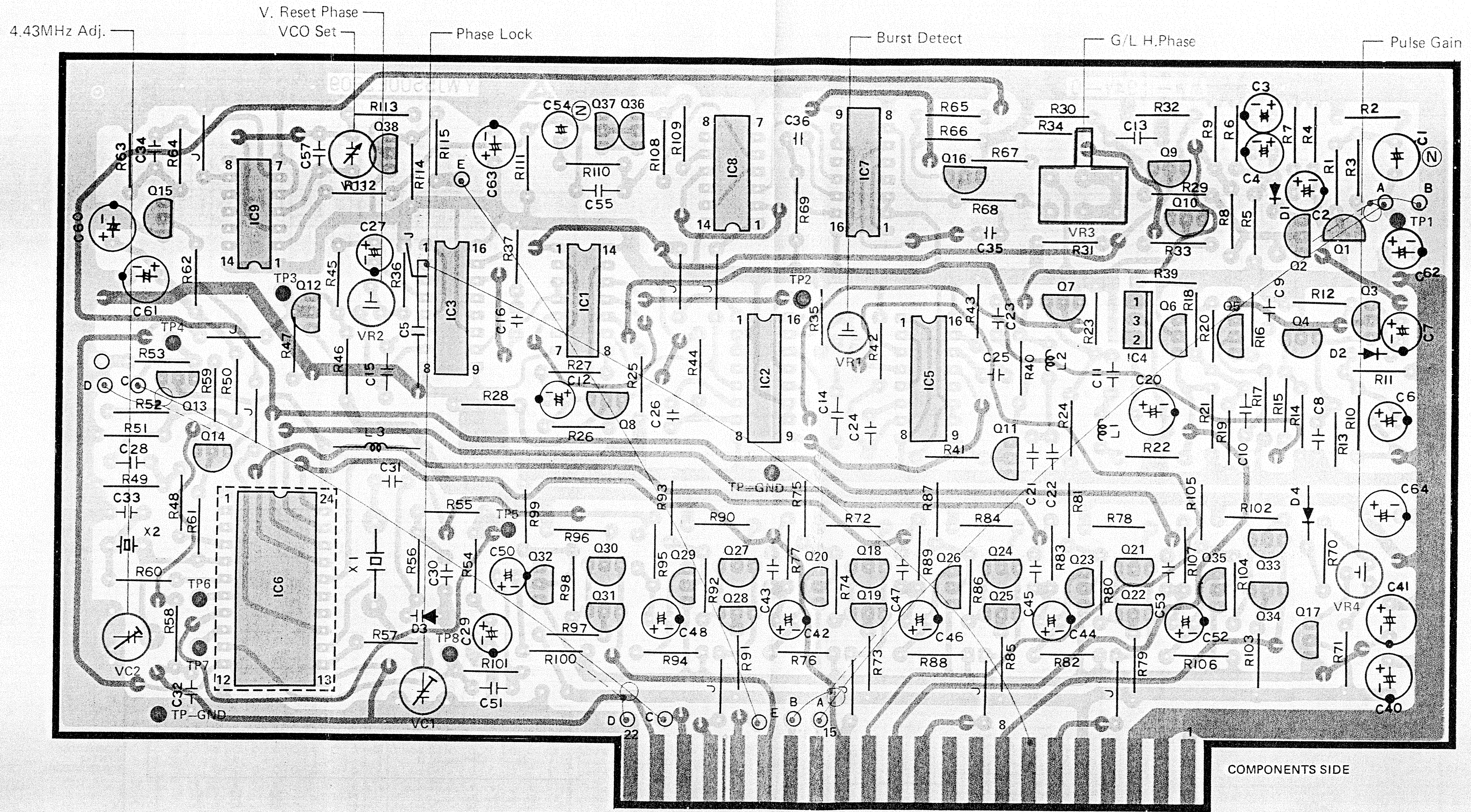
Telefon 781 20 44 / 45

CONDUCTOR VIEW OF YWJ5500EZK09
(SYNC CIRCUIT BOARD)

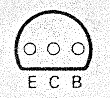

4.43MHz Adj.
V. Reset Phase
VCO Set
Phase Lock
Burst Detect
G/L H.Phase
Pulse Gain
VC2
VC1
VR1
VR2
VR3
VR4
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP-GND
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC9
X1
X2
L1
L2
L3
COMPONENTS SIDE

IC1	YWHD74LS00P
IC2	YWHD74221P
IC3	YWHD74LS221P
IC4	YHSFS7805M
IC5	YWHD74LS221P
IC6	MN6065
IC7	YWHD74221P
IC8	YWMC4044P
IC9	YWMC4024P

Q1	2SC828RS
Q2	2SA564RS
Q3	2SC1047CD
Q4	2SC1047CD
Q5	2SA564RS
Q6	2SC828RS
Q7	2SA564RS
Q8	2SA564RS
Q9	2SC828RS
Q10	2SC828RS
Q11	2SC828RS
Q12	2SA564RS
Q13	2SC828RS
Q14	2SA564RS
Q15	2SC1047CD
Q16	2SC828RS
Q17	2SA720RS
Q18	2SC1318RS
Q19	2SA720RS
Q20	2SC1047CD
Q21	2SC1318RS
Q22	2SA720RS
Q23	2SC1047CD
Q24	2SC1318RS
Q25	2SA720RS
Q26	2SC1047CD
Q27	2SC1318RS
Q28	2SA720RS
Q29	2SC1047CD
Q30	2SC1318RS
Q31	2SA720RS
Q32	2SC1047CD
Q33	2SC1318RS
Q34	2SA720RS
Q35	2SC1047CD
Q36	2SC828RS
Q37	2SC828RS
Q38	2SA564RS

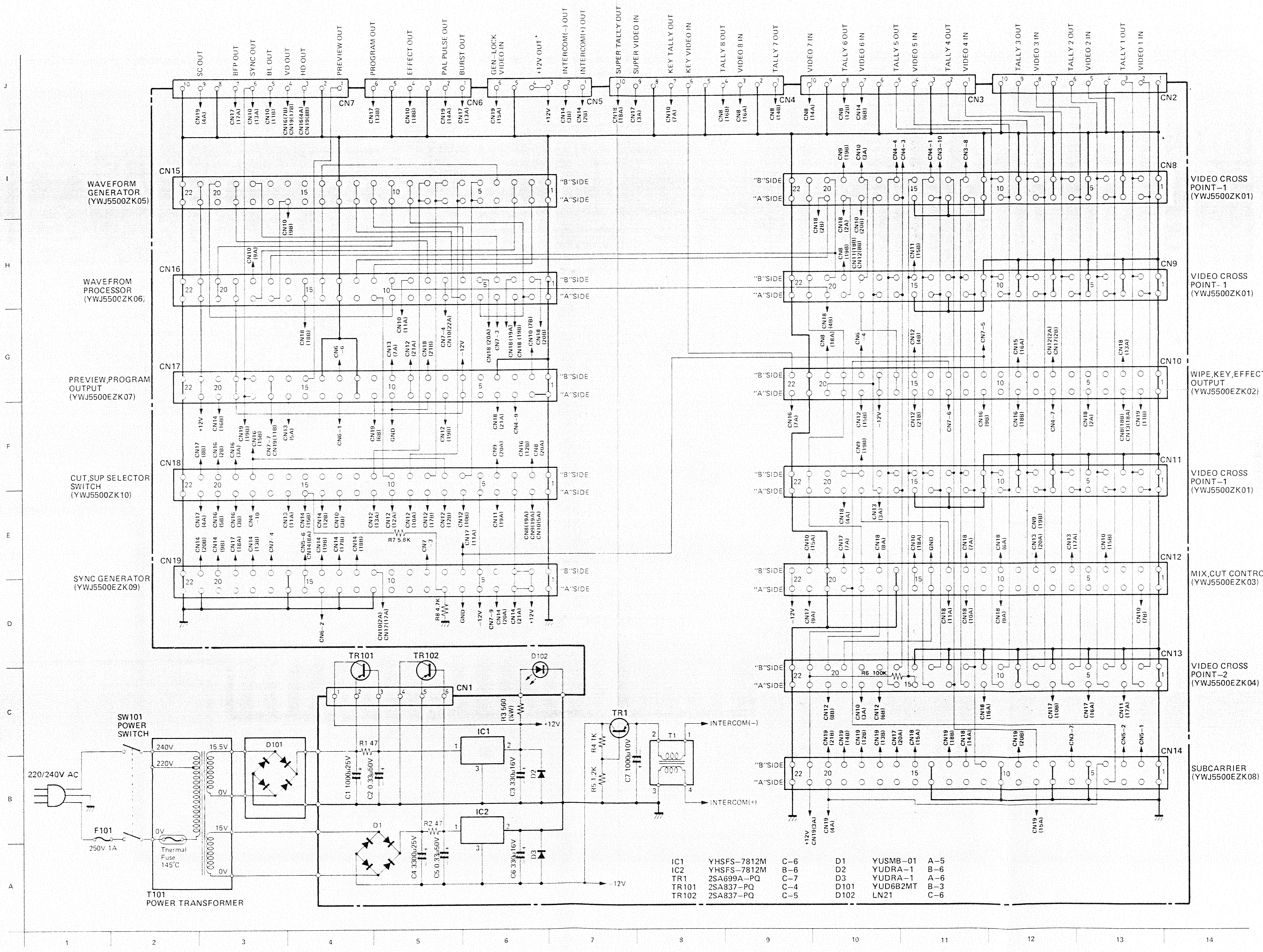
D1	MA162
D2	OA90
D3	YUD1S2139C
D4	MA162

(Top View)



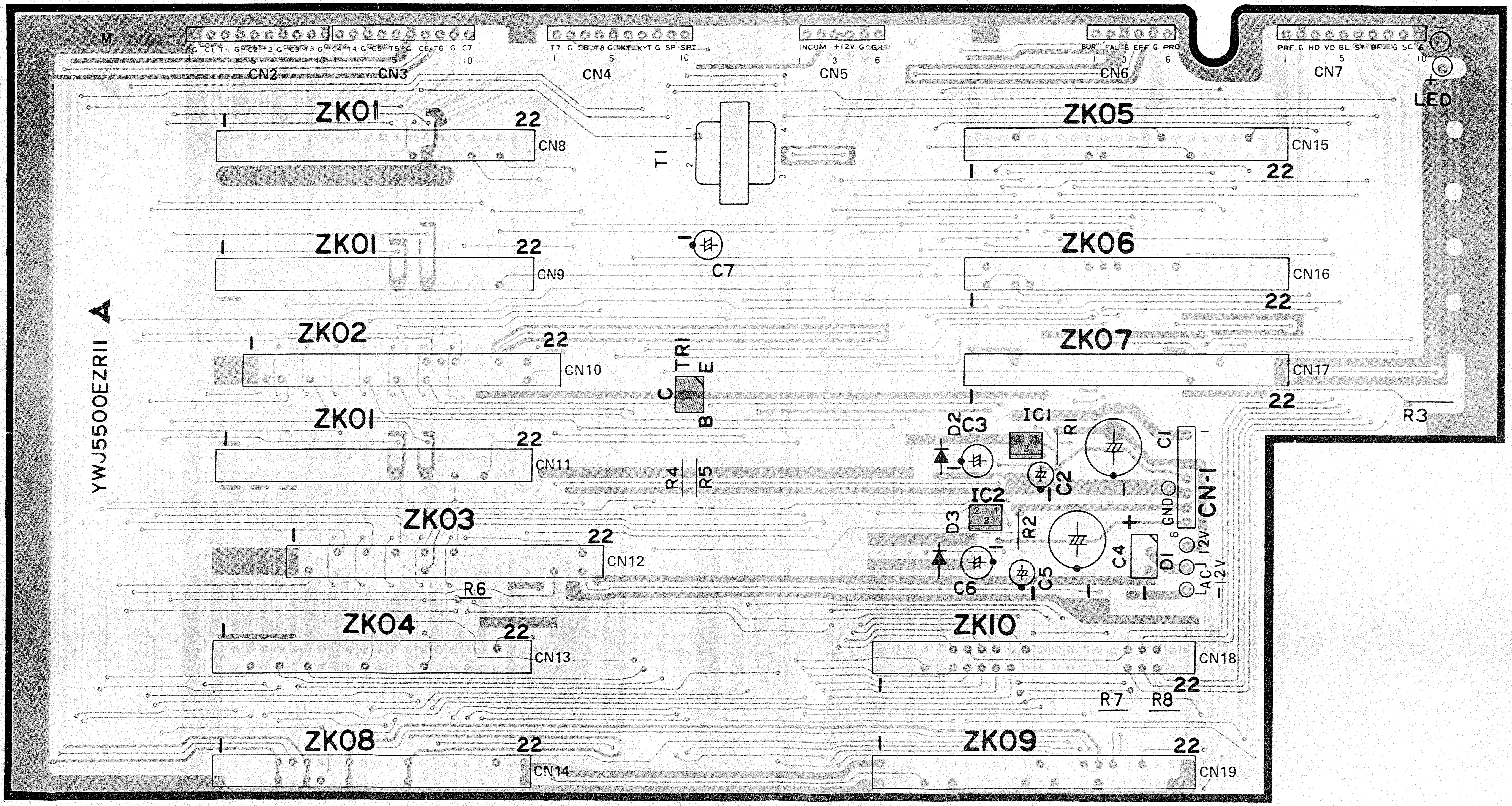
All Transistors

SCHEMATIC DIAGRAM OF MOTHER BOARD
(YWJ5500EZK11)


SC OUT
BFP OUT
SYNC OUT
BL OUT
VD OUT
HD OUT
PREVIEW OUT
PROGRAM OUT
EFFECT OUT
PAL PULSE OUT
BURST OUT
GEN-LOCK VIDEO IN
+12V OUT
INTERCOM(−) OUT
INTERCOM(+) OUT
SUPER TALLY OUT
SUPER VIDEO IN
KEY TALLY OUT
KEY VIDEO IN
TALLY 8 OUT
VIDEO 8 IN
TALLY 7 OUT
VIDEO 7 IN
TALLY 6 OUT
VIDEO 6 IN
TALLY 5 OUT
VIDEO 5 IN
TALLY 4 OUT
VIDEO 4 IN
TALLY 3 OUT
VIDEO 3 IN
TALLY 2 OUT
VIDEO 2 IN
TALLY 1 OUT
VIDEO 1 IN
CN7
CN6
CN5
CN4
CN3
CN2
CN15
WAVEFORM GENERATOR (YWJ5500ZK05)
CN16
WAVEFROM PROCESSOR (YWJ5500ZK06)
CN17
PREVIEW,PROGRAM OUTPUT (YWJ5500EZK07)
CN18
CUT,SUP SELECTOR SWITCH (YWJ5500ZK10)
CN19
SYNC GENERATOR (YWJ5500EZK09)
"B"SIDE
"A"SIDE
CN8
VIDEO CROSS POINT−1 (YWJ5500ZK01)
CN9
VIDEO CROSS POINT−1 (YWJ5500ZK01)
CN10
WIPE,KEY,EFFECT OUTPUT (YWJ5500EZK02)
CN11
VIDEO CROSS POINT−1 (YWJ5500ZK01)
CN12
MIX,CUT CONTROL (YWJ5500EZK03)
CN13
VIDEO CROSS POINT−2 (YWJ5500EZK04)
CN14
SUBCARRIER (YWJ5500EZK08)
R7 5.6K
R8 4.7K
R6 100K
TR101
TR102
D102
CN1
R3 560 (¼W)
+12V
TR1
R4 1K
R5 1.2K
C7 1000μ10V
T1
INTERCOM(−)
INTERCOM(+)
SW101 POWER SWITCH
220/240V AC
F101
250V 1A
240V
220V
15.5V
0V
15V
Thermal Fuse 145°C
T101 POWER TRANSFORMER
D101
R1 47
IC1
C1 1000μ25V
C2 0.33μ50V
C3 330μ16V
D2
D1
R2 47
IC2
C4 3300μ25V
C5 0.33μ50V
C6 330μ16V
D3
−12V
+12V CN19(3A)
CN19 (4A)
CN19 (15A)
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14

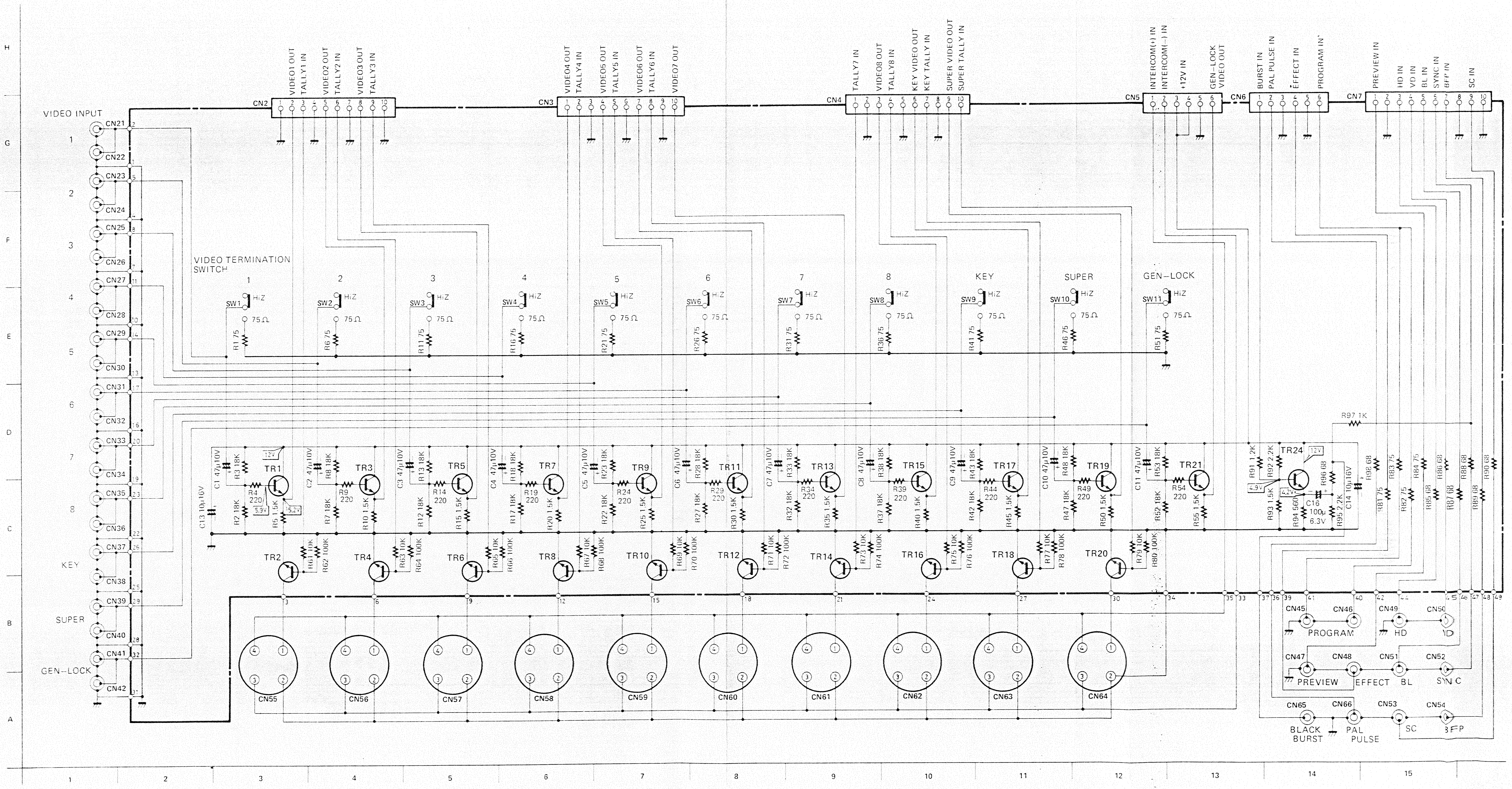
IC1	YHSFS−7812M	C−6	D1	YUSMB−01	A−5
IC2	YHSFS−7812M	B−6	D2	YUDRA−1	B−6
TR1	2SA699A−PQ	C−7	D3	YUDRA−1	A−6
TR101	2SA837−PQ	C−4	D101	YUD6B2MT	B−3
TR102	2SA837−PQ	C−5	D102	LN21	C−6

CONDUCTOR VIEW OF YWJ5500EZK11
(MOTHER BOARD)


M
G C1 T1 G C2 T2 G C3 T3 G
1 5 10
CN2
C4 T4 G C5 T5 G C6 T6 G C7
1 5 10
CN3
T7 G C8 T8 G KY KYT G SP SPT
1 5 10
CN4
INCOM +12V G G/L
1 3 6
CN5
M
BUR PAL G EFF G PRO
1 3 6
CN6
PRE G HD VD BL SY BF G SC G
1 5 10
CN7
−
+
LED
ZK01
1
22
CN8
T1
1
2
3
4
ZK05
CN15
1
22
ZK01
1
22
CN9
C7
ZK06
CN16
1
22
YWJ5500EZRII
ZK02
1
22
CN10
TR1
C
E
B
ZK07
CN17
1
22
R3
ZK01
1
22
CN11
R4
R5
D2
C3
IC1
R1
C1
C2
IC2
D3
R2
C4
D1
C5
C6
GND
6
12V
AC
−12V
CN-1
ZK03
1
22
CN12
R6
ZK04
1
22
CN13
ZK10
CN18
1
22
R7
R8
ZK08
1
22
CN14
ZK09
1
22
CN19

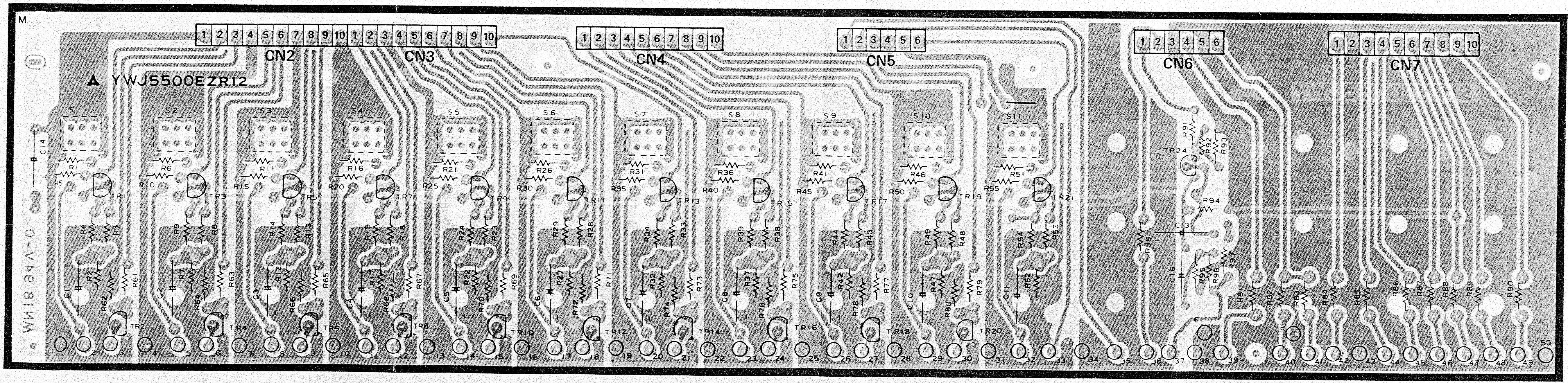
IC1	YHSFS-7812M	D1	YUSMB01	TR1	2SA699APQ
IC2	YHSFS-7812M	D2	YUDRA-1		
		D3	YUDRA-1		

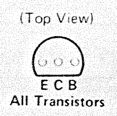
SCHEMATIC DIAGRAM OF CONNECTION BOARD
(YWJ5500EZK12)


VIDEO INPUT
1
2
3
4
5
6
7
8
KEY
SUPER
GEN–LOCK
CN21
CN22
CN23
CN24
CN25
CN26
CN27
CN28
CN29
CN30
CN31
CN32
CN33
CN34
CN35
CN36
CN37
CN38
CN39
CN40
CN41
CN42
CN2
VIDEO1 OUT
TALLY1 IN
VIDEO2 OUT
TALLY2 IN
VIDEO3 OUT
TALLY3 IN
CN3
VIDEO4 OUT
TALLY4 IN
VIDEO5 OUT
TALLY5 IN
VIDEO6 OUT
TALLY6 IN
VIDEO7 OUT
CN4
TALLY7 IN
VIDEO8 OUT
TALLY8 IN
KEY VIDEO OUT
KEY TALLY IN
SUPER VIDEO OUT
SUPER TALLY IN
CN5
INTERCOM(+) IN
INTERCOM(–) IN
+12V IN
GEN–LOCK VIDEO OUT
CN6
BURST IN
PAL PULSE IN
EFFECT IN
PROGRAM IN
CN7
PREVIEW IN
HD IN
VD IN
BL IN
SYNC IN
BFP IN
SC IN
VIDEO TERMINATION SWITCH
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
SW11
HiZ
75Ω
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
TR13
TR14
TR15
TR16
TR17
TR18
TR19
TR20
TR21
TR24
R97 1K
C13 10μ16V
C14 10μ16V
C16 100μ 6.3V
CN55
CN56
CN57
CN58
CN59
CN60
CN61
CN62
CN63
CN64
CN45
CN46
PROGRAM
CN49
HD
CN50
VD
CN47
PREVIEW
CN48
EFFECT
CN51
BL
CN52
SYNC
CN65
BLACK BURST
CN66
PAL PULSE
CN53
SC
CN54
BFP
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

TR1	2SC828RS	C–3
TR2	2SC828RS	C–3
TR3	2SC828RS	C–4
TR4	2SC828RS	C–4
TR5	2SC828RS	C–5
TR6	2SC828RS	C–5
TR7	2SC828RS	C–6
TR8	2SC828RS	C–6
TR9	2SC828RS	C–7
TR10	2SC828RS	C–7
TR11	2SC828RS	C–8
TR12	2SC828RS	C–8
TR13	2SC828RS	C–9
TR14	2SC828RS	C–9
TR15	2SC828RS	C–10
TR16	2SC828RS	C–10
TR17	2SC828RS	C–11
TR18	2SC828RS	C–11
TR19	2SC828RS	C–12
TR20	2SC828RS	C–12
TR21	2SC828RS	C–13
TR24	2SC1317RS	C–14

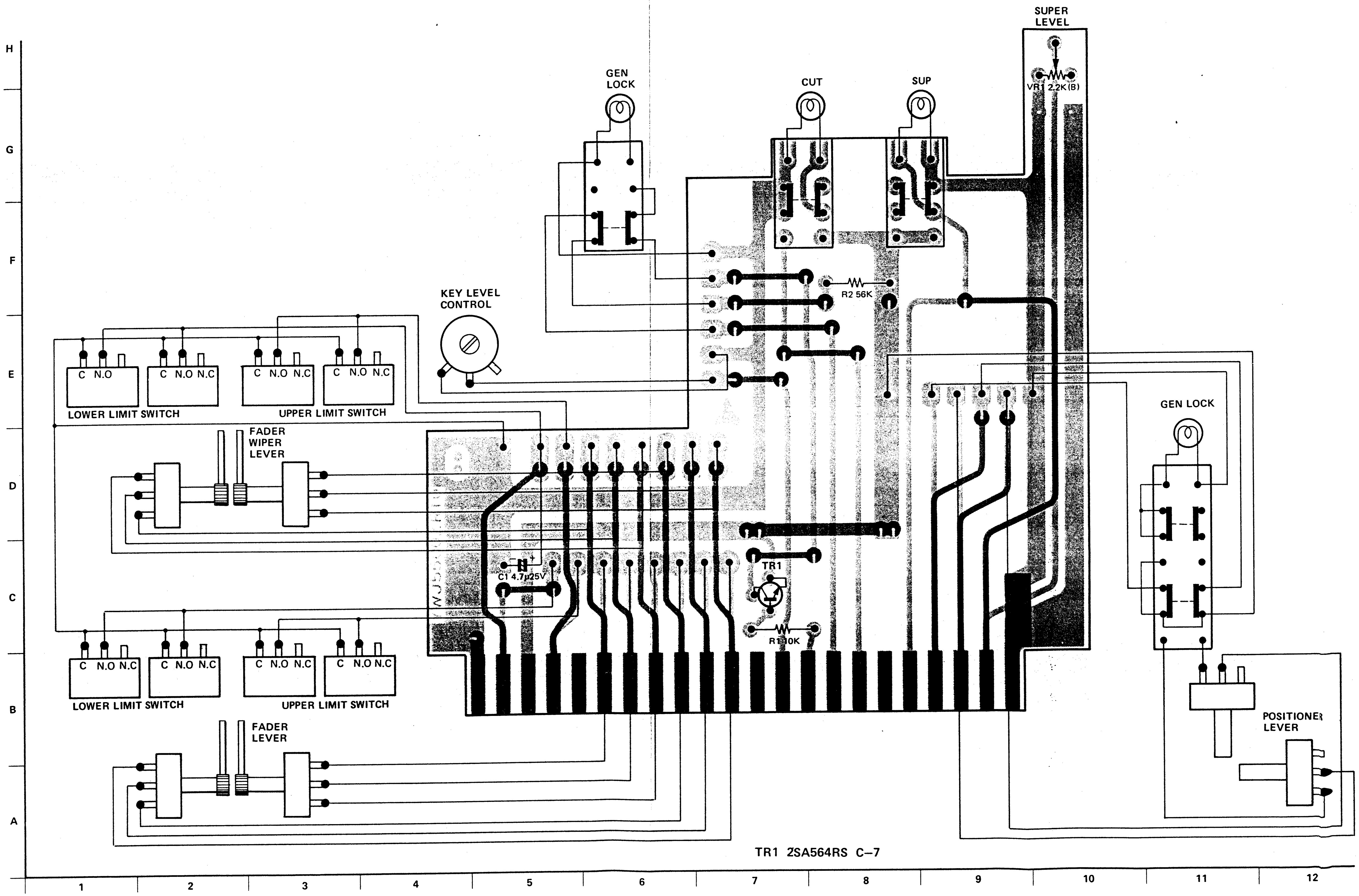
CONDUCTOR VIEW OF YWJ5500EZK12
(CONNECTION BOARD)


M
YWJ5500EZR12
WN1B 3AE V-0
CN2
CN3
CN4
CN5
CN6
CN7
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
TR24
R91
R92
R93
R94
C13
C16
R98
C14


(Top View)
E C B
All Transistors

TR1 ~ TR21	2SC828RS
TR24	2SC1317RS

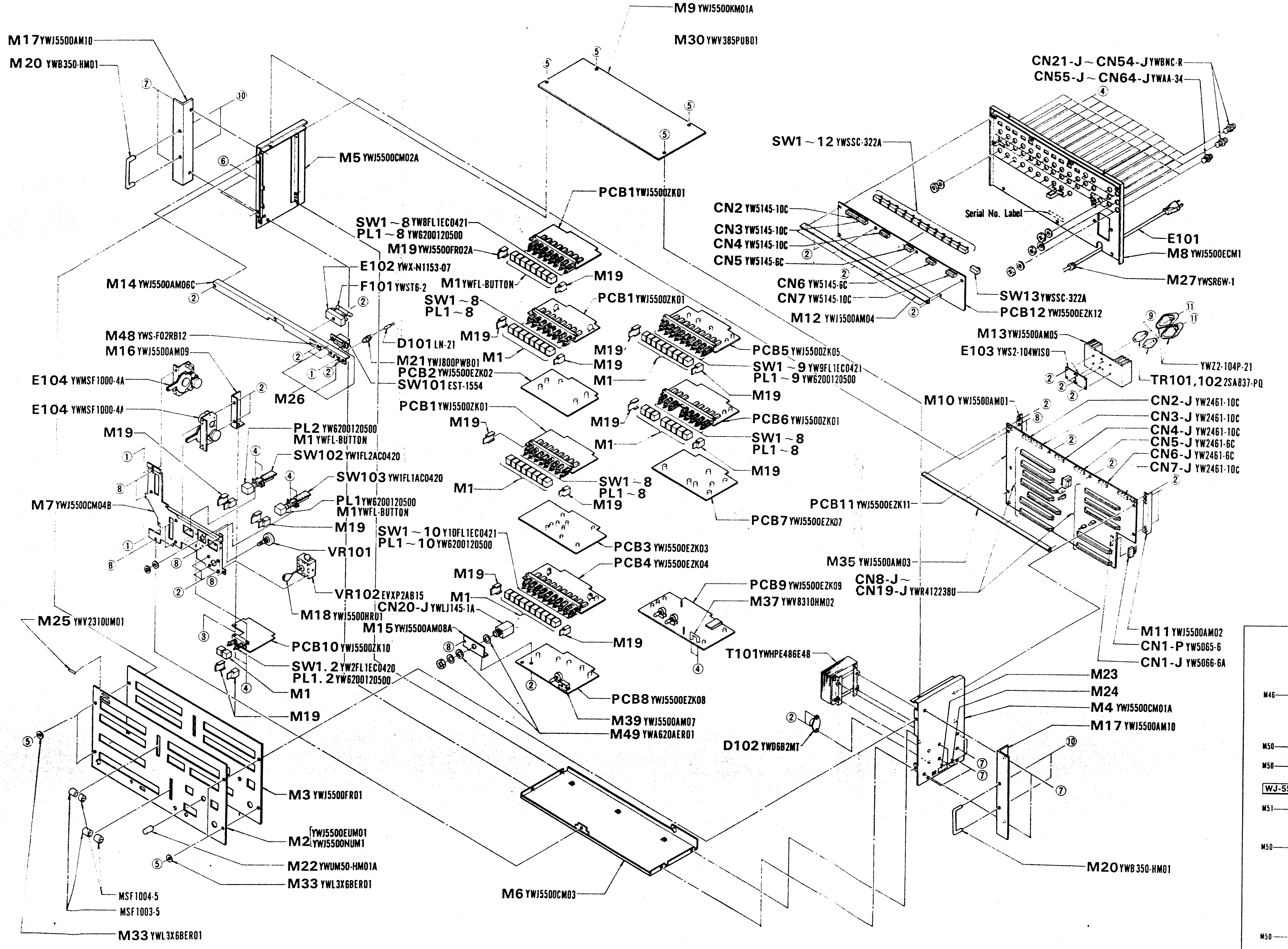
WIRING DIAGRAM OF YWJ5500ZK10
(CUT. SUP SELECTOR SWITCH BOARD)

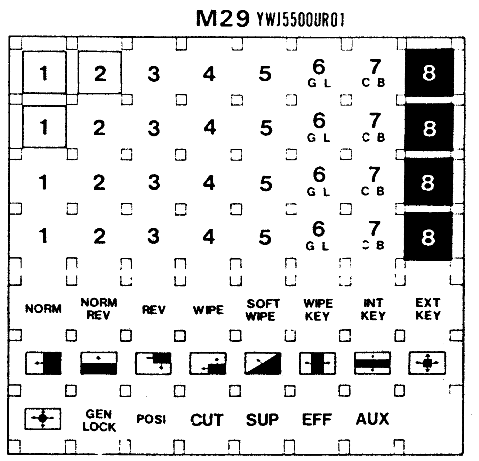


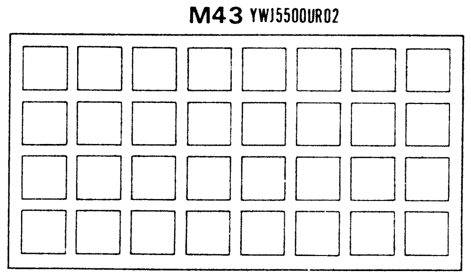
SUPER
LEVEL
VR1 2.2K(B)
GEN
LOCK
CUT
SUP
KEY LEVEL
CONTROL
R2 56K
C N.O
C N.O N.C
C N.O N.C
C N.O N.C
LOWER LIMIT SWITCH
UPPER LIMIT SWITCH
FADER
WIPER
LEVER
GEN LOCK
C1 4.7μ25V
TR1
R1 10K
C N.O N.C
C N.O N.C
C N.O N.C
C N.O N.C
LOWER LIMIT SWITCH
UPPER LIMIT SWITCH
FADER
LEVER
POSITIONER
LEVER
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12

TR1 2SA564RS C–7

WJ-5500N/E EXPLODED VIEW


M9 YWJ5500KM01A
M30 YWV385PUB01
M17 YWJ5500AM10
M20 YWB350-HM01
M5 YWJ5500CM02A
PCB1 YWJ5500ZK01
SW1～8 YW8FL1EC0421
PL1～8 YW6200120500
M19 YWJ5500FR02A
E102 YWX-N1153-07
M14 YWJ5500AM06C
F101 YWST6-2
M1 YWFL-BUTTON
M19
SW1～8
PL1～8
PCB1 YWJ5500ZK01
M48 YWS-F02RB12
M16 YWJ5500AM09
D101 LN-21
M19
M21 YWJ800PWB01
M1
PCB2 YWJ5500EZK02
SW101 EST-1554
E104 YWMSF1000-4A
M26
E104 YWMSF1000-4A
PCB1 YWJ5500ZK01
M19
PL2 YW6200120500
M1 YWFL-BUTTON
SW102 YW1FL2AC0420
SW103 YW1FL1AC0420
M7 YWJ5500CM04B
PL1 YW6200120500
M1 YWFL-BUTTON
M19
M1
SW1～8
PL1～8
M19
SW1～10 Y10FL1EC0421
PL1～10 YW6200120500
VR101
VR102 EVXP2AB15
M18 YWJ5500HR01
M19
M1
CN20-J YWLJ145-1A
M15 YWJ5500AM08A
M25 YWV2310UM01
PCB10 YWJ5500ZK10
SW1. 2 YW2FL1EC0420
PL1. 2 YW6200120500
M1
M19
M19
M3 YWJ5500FR01
M2 YWJ5500EUM01
YWJ5500NUM1
M22 YWUM50-HM01A
M33 YWL3X6BER01
MSF1004-5
MSF1003-5
M33 YWL3X6BER01
M6 YWJ5500CM03
PCB3 YWJ5500EZK03
PCB4 YWJ5500EZK04
PCB8 YWJ5500EZK08
M39 YWJ5500AM07
M49 YWA620AER01
M19
M1
M19
PCB5 YWJ5500ZK05
SW1～9 YW9FL1EC0421
PL1～9 YW6200120500
M19
PCB6 YWJ5500ZK01
M1
SW1～8
PL1～8
M19
PCB7 YWJ5500EZK07
PCB9 YWJ5500EZK09
M37 YWV8310HM02
T101 YWHPE486E48
D102 YWD6B2MT
SW1～12 YWSSC-322A
CN2 YW5145-10C
CN3 YW5145-10C
CN4 YW5145-10C
CN5 YW5145-6C
CN6 YW5145-6C
CN7 YW5145-10C
M12 YWJ5500AM04
Serial No. Label
SW13 YWSSC-322A
PCB12 YWJ5500EZK12
CN21-J～CN54-J YWBNC-R
CN55-J～CN64-J YWAA-34
E101
M8 YWJ5500ECM1
M27 YWSR6W-1
M13 YWJ5500AM05
E103 YWS2-104WISO
YWZ2-104P-21
TR101,102 2SA837-PQ
M10 YWJ5500AM01
CN2-J YW2461-10C
CN3-J YW2461-10C
CN4-J YW2461-10C
CN5-J YW2461-6C
CN6-J YW2461-6C
CN7-J YW2461-10C
PCB11 YWJ5500EZK11
M35 YWJ5500AM03
CN8-J～
CN19-J YWR412238U
M11 YWJ5500AM02
CN1-P YW5065-6
CN1-J YW5066-6A
M23
M24
M4 YWJ5500CM01A
M17 YWJ5500AM10
M20 YWB350-HM01
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪

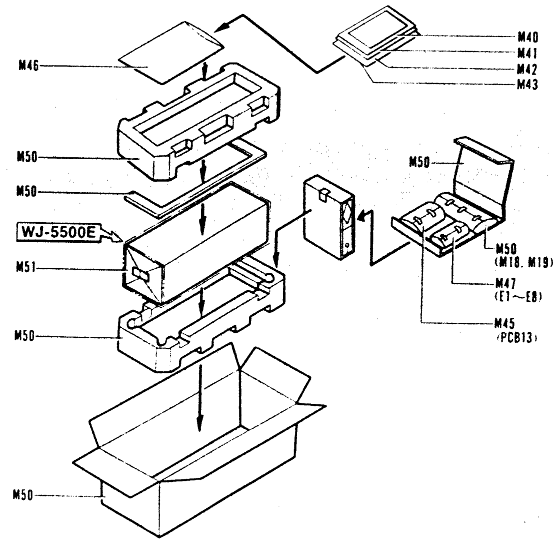

M29 YWJ5500UR01
1
2
3
4
5
6 GL
7 CB
8
NORM
NORM REV
REV
WIPE
SOFT WIPE
WIPE KEY
INT KEY
EXT KEY
GEN LOCK
POSI
CUT
SUP
EFF
AUX


M43 YWJ5500UR02

○NUMBERS SHOW SCREWS.

NO.	SCREWS	DESCRIPTION
1	XSB4+6FX	Binding Head Screws
2	XSB3+6FX	Binding Head Screws
3	XTB3+6FFX	Binding Head Tapping Screws
4	XSB26+6FX	Binding Head Screws
5	XSB3+8FN	Binding Head Screws
6	XSB3+6FZ	Binding Head Screws
7	XSB4+6FZ	Binding Head Screws
8	XSB3+6FV	Binding Head Screws
9	XSB3+12BN	Binding Head Screws
10	XSS4+6FX	Flush Head
11	XSB3+20BN	Binding Head Screws

PACKAGING


M40
M41
M42
M43
M46
M50
M50
WJ-5500E
M51
M50
M50
M50
M50
(M18. M19)
M47
(E1～E8)
M45
(PCB13)

REPLACEMENT PARTS LIST

Important Notice

1. Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
2. Components identified by * mark are new parts used from this model.

MODEL WJ-5500E/5500N

WJ-5500E/5500N
[COLOR SPECIAL EFFECTS GENERATOR]
MISCELLANEOUS

SYMBOL NO.	PART NO.	DESCRIPTION
TR101, TR102	2SA837-PQ	Transistor
D101	LN-21	Light Emitting Diode
D102	YUD6B2MT	Diode
T101 ⚠	*YWHPE486E48	Power Transformer
VR101	EVCB0AK20B13	Variable Resistor 1KΩ
VR102	*EVXP2AB15	Variable Resistor 1MΩ
SW101	EST-1554	Power Switch
SW102	*YW1FL-2AC042	Gen Lock Switch
SW103	*YW1FL1AC0421	Posi Switch
F101 ⚠	YWTS1A	1A Fuse
E101 ⚠	YWHCE-308-DF YWKPLTSA-8 YWHBS-3-08 YWVM0099-08	Power cord for WJ-5000N Power cord for WJ-5500N Power cord for WJ-5500E/B Power cord for WJ-5500E/J
E102 ⚠	YWX-N1153-07	Fuse Holder
E103	YWS2-104WIS0	Transistor Socket (x2)
E104	YWMSF1000-4A	Wipe, Mix Lever Assembly (x2)
E105	YW2478TL	Plug - Female Pin (x6)
PL1,2	YW6200120500	Lamp (x2)
CN1-P	YW5265-6	6-Pin Plug - Female
CN21-J~CN54-J	YWBNC-R	BNC Jack (x34)
CN55-J~NC64-J	YWAA-34	Tally, Intercom Jack (x10)
M1	YWFL-BUTTON	Button for Switch (x55)
M2	*YWJ5500EUM01 *YWJ5500NUM1	Decoration Panel for WJ-5500E Decoration Panel for WJ-5500N
M3	*YWJ5500FR01	Decide Position Sheet
M4	*YWJ5500CM01A	Right Side Panel
M5	*YWJ5500CM02A	Left Side Panel
M6	*YWJ5500CM03A	Bottom Panel
M7	*YWJ5500CM04B	Fastening Bracket for Fader
M8	*YWJ5500ECM01	Rear Panel
M9	*YWJ5500KM01A	Upper Panel
M10	*YWJ5500AM01	Support Bracket for Mother Board A
M11	*YWJ5500AM02	Support Bracket for Mother Board B
M12	*YWJ5500AM04	Support Bracket for Connector
M13	*YWJ5500AM05	Heat Sink
M14	*YWJ5500AM06C	Fastening Bracket for Power Supply
M15	*YWJ5500AM08A	Fastening Bracket for Jack
M16	*YWJ5500AM09	Support Bracket for P.C. Board
M17	*YWJ5500AM10	Rack Bracket (x2)
M18	*YWJ5500HR01	Position Lever Knob
M19	*YWJ5500FR02A	Decide Position Bracket (x18)
M20	YWJB350-HM01	Rack Handle (x2)
M21	YWJ800PWB01	Light Emitting Diode Holder
M22	YWUM50-HM01A	φ 14 Knob
M23	*YWJ5500EUR2 *YWJ5500NUR1	Main Label for WJ-5500E Main Label for WJ-5500N
M25	YWV2310UM01	E-S-D Color Mark
M24	YW-B-UR01A	Country Origin Label for WV-5500E/B
M25	YWV2310UM01	E-S-D Color Mark
M26	YW-BCG-UR01A	Terminal Label
M27	YWSR6W-1	Cord Bushing
M29	*YWJ5500UR01	Expression Card A for Switch
M30	*YWJ5500EUR1	Expression Card C for Switch
M33	YWL3X6BER01	Polyethylene Washer
M35	*YWJ5500AM03	Fastening Bracket for Mather Board
M48	YWS-E02RB12	Fuse Rated Label
M49	YWA620AER01	Insulator Washer (x2)

YWJ5500ZK01
[Video Cross Point-1 Circuit Board]

SYMBOL NO.	PART NO.	DESCRIPTION
PCB1	*YWJ5500ZK01	Printed Circuit Board Assembly
IC1, 2	YWMC14081BCP	Integrated Circuit
IC3	YWMC14073BCP	Integrated Circuit
IC4, 5	*YWMC14175BCP	Integrated Circuit
TR1~19	2SC828-RS	Transistor
TR20~28	2SC1318-QR	Transistor
D1~17	MA162	Diode
R1~4	ERD18TJ563	Carbon 56KΩ ⅛W
R6	ERD18TJ103	Carbon 10KΩ ⅛W
R7	ERD18TJ563	Carbon 56KΩ ⅛W
R8	ERD18TJ221	Carbon 220Ω ⅛W
R9	ERD18TJ103	Carbon 10KΩ ⅛W
R10	ERD18TJ221	Carbon 220Ω ⅛W
R11	ERD18TJ103	Carbon 10KΩ ⅛W
R12	ERD18TJ221	Carbon 220Ω ⅛W
R13	ERD18TJ103	Carbon 10KΩ ⅛W
R14	ERD18TJ221	Carbon 220Ω ⅛W
R15	ERD18TJ103	Carbon 10KΩ ⅛W
R16	ERD18TJ221	Carbon 220Ω ⅛W
R17	ERD18TJ103	Carbon 10KΩ ⅛W
R18	ERD18TJ221	Carbon 220Ω ⅛W
R19	ERD18TJ103	Carbon 10KΩ ⅛W
R20	ERD18TJ221	Carbon 220Ω ⅛W
R21	ERD18TJ103	Carbon 10KΩ ⅛W
R22	ERD18TJ221	Carbon 220Ω ⅛W
R23	ERD18TJ103	Carbon 10KΩ ⅛W
R24	ERD18TJ332	Carbon 3.3KΩ ⅛W
R25	ERD18TJ221	Carbon 220Ω ⅛W
R26	ERD18TJ102	Carbon 1KΩ ⅛W
R27	ERD18TJ563	Carbon 56KΩ ⅛W
R28	ERD18TJ472	Carbon 4.7KΩ ⅛W
R29,30	ERD18TJ103	Carbon 10KΩ ⅛W
R31	ERD18TJ102	Carbon 1KΩ ⅛W
R32~47	ERD18TJ103	Carbon 10KΩ ⅛W
R48	ERD12FJ181	Carbon 180Ω ⅛W
R49	ERD18TJ103	Carbon 10KΩ ⅛W

SYMBOL NO.	PART NO.	DESCRIPTION
C1	ECEB25V4R7L	Electrolytic 4.7μF 25V
C2	ECEA16V100L	Electrolytic 100μF 16V
SW1~8	YW8FL1EC0420	Camera Input Selector Switch
PL1~8	YW6200120500	Lamp (x8)
M19	*YWJ5500FR02A	Deside Position Vracket (x2)

This Set uses 3 Pes. of this Printed Circuit Board.

YWJ5500EZK02
[Wipe, Key, Effect Output Circuit Board]

SYMBOL NO.	PART NO.	DESCRIPTION
PCB2	*YWJ5500EZK02	Printed Circuit Board Assembly
IC1	AN904	Integrated Circuit
IC2	YWMC14011BCP	Integrated Circuit
IC3	*YWMC14528BCP	Integrated Circuit
TR1	YUT2SK34-CD	Field Effect Transistor
TR2	YUT2SK19-Y	Field Effect Transistor
TR3,4	2SC828-RS	Transistor
TR5	2SA838BC	Transistor
TR6	2SC828-RS	Transistor
TR7	YUT2SK34-CD	Field Effect Transistor
TR8	YUT2SK19-Y	Field Effect Transistor
TR9~10	2SC828-RS	Transistor
TR11	2SA564-RS	Transistor
TR12	2SC828-RS	Transistor
TR13	YUT2SK34-CD	Field Effect Transistor
TR14	2SC828-RS	Transistor
TR15	2SC1047CD	Transistor
TR16,17	2SC828-RS	Transistor
TR18	2SC1047-CD	Transistor
TR19	2SC828-RS	Transistor
TR20	2SC1383-PQ	Transistor
TR21,22	2SA564-RS	Transistor
TR23	2SA564-PQR	Transistor
TR24	2SC828-RS	Transistor
TR25	2SA564-RS	Transistor
TR26	2SC828-RS	Transistor
TR27	2SA564-RS	Transistor
TR28,29	2SC828-RS	Transistor
TR30 TR31	}2SA564-RS	Transistor
TR33	2SC828-RS	Transistor
TR35,36	2SA564-RS	Transistor
TR37	2SC828-RS	Transistor
TR38~ TR40	}2SC564-RS	Transistor
TR41	2SC828-RS	Transistor
D1~3	MA162	Diode
R1	ERD14FJ104	Carbon 100KΩ ¼W
R2	ERD14FJ222	Carbon 2.2KΩ ¼W
R3	ERD14FJ821	Carbon 820Ω ¼W
R4	ERD14FJ561	Carbon 560Ω ¼W
R5	ERD14FJ222	Carbon 2.2KΩ ¼W
R6	ERD14FJ102	Carbon 1KΩ ¼W
R7	ERD14FJ152	Carbon 1.5KΩ ¼W
R8	ERD14FJ102	Carbon 1KΩ ¼W
R9	ERD14FJ821	Carbon 820Ω ¼W
R10	ERD14FJ152	Carbon 1.5KΩ ¼W
R11	ERD14FJ331	Carbon 330Ω ¼W
R12	ERD14FJ271	Carbon 270Ω ¼W
R13	ERD14FJ152	Carbon 1.5KΩ ¼W
R14	ERD14FJ821	Carbon 820Ω ¼W
R15	ERD14FJ471	Carbon 470Ω ¼W
R16	ERD14FJ271	Carbon 270Ω ¼W
R17	ERD14FJ821	Carbon 820Ω ¼W
R18	ERD14FJ221	Carbon 220Ω ¼W
R19	ERD14FJ222	Carbon 2.2KΩ ¼W
R20	ERD14FJ562	Carbon 5.6KΩ ¼W
R21,22	ERD14FJ821	Carbon 820Ω ¼W
R23,24	ERD14FJ222	Carbon 2.2KΩ ¼W
R25,26	ERD14FJ221	Carbon 220Ω ¼W
R27	ERD14FJ102	Carbon 1KΩ ¼W
R28	ERD14FJ104	Carbon 100KΩ ¼W
R29	ERD14FJ221	Carbon 220Ω ¼W
R30	ERD14FJ152	Carbon 1.5KΩ ¼W
R31	ERD14FJ222	Carbon 2.2KΩ ¼W
R32	ERD14FJ103	Carbon 10KΩ ¼W
R33	ERD14FJ104	Carbon 100KΩ ¼W
R34	ERD14FJ102	Carbon 1KΩ ¼W
R35	ERD14FJ153	Carbon 15KΩ ¼W
R36	ERD14FJ332	Carbon 3.3KΩ ¼W
R37	ERD14FJ681	Carbon 680Ω ¼W
R38	ERD14FJ222	Carbon 2.2KΩ ¼W
R39	ERD14FJ562	Carbon 5.6KΩ ¼W
R40	ERD14FJ222	Carbon 2.2KΩ ¼W
R41	ERD14FJ122	Carbon 1.2KΩ ¼W
R42	ERD14FJ103	Carbon 10KΩ ¼W
R43	ERD14FJ222	Carbon 2.2KΩ ¼W
R44	ERD14FJ562	Carbon 5.6KΩ ¼W
R45	ERD14FJ563	Carbon 56KΩ ¼W
R46	ERD14FJ105	Carbon 1MΩ ¼W
R47	ERD14FJ562	Carbon 5.6KΩ ¼W
R48	ERD14FJ560	Carbon 56Ω ¼W
R49	ERD14FJ332	Carbon 3.3KΩ ¼W
R50	ERD14FJ471	Carbon 470Ω ¼W
R51	ERD14FJ560	Carbon 56Ω ¼W
R52	ERD14FJ332	Carbon 3.3KΩ ¼W
R53	ERD14FJ102	Carbon 1KΩ ¼W
R54	ERD14FJ221	Carbon 220Ω ¼W
R55	ERD14FJ332	Carbon 3.3KΩ ¼W
R56	ERD14FJ183	Carbon 18KΩ ¼W
R57	ERD14FJ122	Carbon 1.2KΩ ¼W
R58	ERD14FJ153	Carbon 15KΩ ¼W
R59	ERD14FJ223	Carbon 22KΩ ¼W

SYMBOL NO.	PART NO.	DESCRIPTION		
R60	ERD14FJ221	Carbon	220Ω	¼W
R61	ERD12FJ681	Carbon	680Ω	½W
R62	ERD14FJ223	Carbon	22KΩ	¼W
R63	ERD14FJ123	Carbon	12KΩ	¼W
R64	ERD14FJ681	Carbon	680Ω	¼W
R65	ERD14FJ182	Carbon	1.8KΩ	¼W
R66	ERD14FJ562	Carbon	5.6KΩ	¼W
R67	ERD14FJ682	Carbon	6.8KΩ	¼W
R68	ERD14FJ183	Carbon	18KΩ	¼W
R69	ERD14FJ102	Carbon	1KΩ	¼W
R70	ERD14FJ221	Carbon	220Ω	¼W
R71	ERD14FJ103	Carbon	10KΩ	¼W
R72	ERD14FJ221	Carbon	220Ω	¼W
R73	ERD14FJ222	Carbon	2.2KΩ	¼W
R74	ERD14FJ222	Carbon	2.2KΩ	¼W
R75	ERD14FJ153	Carbon	15KΩ	¼W
R76	ERD14FJ562	Carbon	5.6KΩ	¼W
R77	ERD14FJ222	Carbon	2.2KΩ	¼W
R80	ERD14FJ681	Carbon	680Ω	¼W
R81	ERD14FJ124	Carbon	120KΩ	¼W
R82	ERD14FJ273	Carbon	27KΩ	¼W
R83	ERD14FJ563	Carbon	56KΩ	¼W
R84	ERD14FJ124	Carbon	120KΩ	¼W
R85	ERD14FJ332	Carbon	3.3KΩ	¼W
R86	ERD14FJ103	Carbon	10KΩ	¼W
R87	ERD14FJ221	Carbon	220Ω	¼W
R88,89	ERD14FJ681	Carbon	680Ω	¼W
R90	ERD14FJ222	Carbon	2.2KΩ	¼W
R91	ERD14FJ221	Carbon	220Ω	¼W
R92	ERD14FJ182	Carbon	1.8KΩ	¼W
R93	ERD14FJ103	Carbon	10KΩ	¼W
R94	ERD14FJ562	Carbon	5.6KΩ	¼W
R95	ERD14FJ153	Carbon	15KΩ	¼W
R96	ERD14FJ222	Carbon	2.2KΩ	¼W
R97	ERD14FJ682	Carbon	6.8KΩ	¼W
R98,99	ERD14FJ102	Carbon	1KΩ	¼W
R100	ERD14FJ222	Carbon	2.2KΩ	¼W
R101	ERD14FJ153	Carbon	15KΩ	¼W
R102	ERD14FJ332	Carbon	3.3KΩ	¼W
R103	ERD14FJ681	Carbon	680Ω	¼W
R104	ERD14FJ223	Carbon	22KΩ	¼W
R105	ERD14FJ562	Carbon	5.6KΩ	¼W
R106	ERD14FJ222	Carbon	2.2KΩ	¼W
R107	ERD14FJ151	Carbon	150Ω	¼W
R108	ERD14FJ392	Carbon	3.9KΩ	¼W
VR1~3	YCVRJ6PK102B	Variable Resistor	1KΩ	
VR4,5	YCVRJ6PK501B	Variable Resistor	500Ω	
VR6	YCVRJ6PK102B	Variable Resistor	1KΩ	
VR7	YCVRJ6PK501B	Variable Resistor	500Ω	
VR8	YCVRJ6PK502B	Variable Resistor	5KΩ	
VR9	YCVRJ6PK501B	Variable Resistor	500Ω	
VR10	YCVRJ6PK202B	Variable Resistor	2KΩ	
C1	ECQM1H223KZ	Polyester	0.022μF	50V
C2	ECCF1H270JC	Ceramic	27PF	50V
C3~6	ECEA1CS100	Electrolytic	10μF	16V
C7	ECCF1H151K	Ceramic	150PF	50V
C8	ECEA1CS100	Electrolytic	10μF	16V
C9	ECEA1CS330	Electrolytic	33μF	16V
C10	ECCF1H040K	Ceramic	4PF	50V

SYMBOL NO.	PART NO.	DESCRIPTION		
C11	ECQM1H223KZ	Polyester	0.022μF	50V
C12	ECCF1H270JC	Ceramic	27PF	50V
C13	ECEA1CS100	Electrolytic	10μF	16V
C14	ECQM1H563KZ	Polyester	0.056μF	50V
C15	ECEA1AS470	Electrolytic	47μF	10V
C16	ECEA1CS100	Electrolytic	10μF	16V
C17	ECEA1ES3R3L	Electrolytic	3.3μF	25V
C18	ECV1ZW20X32	Variable Capacitor	20P	
C19	ECCF1H020C	Ceramic	2PF	50V
C20	ECEA10V100L	Electrolytic	100μF	10V
C21	ECKD1H473ZF	Ceramic	0.047μF	50V
C22	ECEA1AS470	Electrolytic	47μF	10V
C23	ECEA1ES470	Electrolytic	47μF	25V
C24	ECCF1H120K	Ceramic	12PF	50V
C25,26	ECEA1AS470	Electrolytic	47μF	10V
C27	ECEA1CS101	Electrolytic	100μF	16V
C28	ECEA1CS330	Electrolytic	33μF	16V
C29	ECEA1ES470	Electrolytic	47μF	25V
C30	ECCF1H680K	Ceramic	68PF	50V
C32,33	ECQM1H102KZ	Polyester	0.001μF	50V
C34	ECEA1ES470	Electrolytic	47μF	25V
C35	ECEA1CS101	Electrolytic	100μF	16V
C36	ECEA1ES470	Electrolytic	47μF	25V
C37	ECCF1H120K	Ceramic	12PF	50V
C38	ECEA1ES470	Electrolytic	47μF	25V
C39	ECEA1HS010	Electrolytic	1μF	50V
C40	ECCF1H330K	Ceramic	33PF	50V
C41,42	ECEA1AS470	Electrolytic	47μF	10V
L1, 2	YSP0406L470K	Inductance	47μH	
TP~6	YWV8300FR06	Check Terminal	(x6)	

YWJ5500EZK03
[Mix · Cut · Control Circuit Board]

PCB 3	*YWJ5500EZK03	Printed Circuit Board Assembly
IC1	YWMC14011BCP	Integrated Circuit
IC2	*YWMC14528BCP	Integrated Circuit
IC3,4	AN-904	Integrated Circuit
TR1	2SC828-RS	Transistor
TR2	2SA564-RS	Transistor
TR3	YUT2SK34-CD	Field Effect Transistor
TR4	YUT2SK19-Y	Field Effect Transistor
TR5	2SC828-RS	Transistor
TR6	2SA838BC	Transistor
TR7	2SC828-RS	Transistor
TR8,9	2SA564-RS	Transistor
TR10	2SC828-RS	Transistor
TR11	2SA564-RS	Transistor
TR12	YUT2SK34-CD	Field Effect Transistor
TR13	YUT2SK19-Y	Field Effect Transistor

SYM-BOL NO.	PART NO.	DESCRIPTION		
TR14~TR16	2SC828-RS	Transistor		
TR17	2SA564-PQR	Transistor		
TR18	2SC828-RS	Transistor		
TR19	2SA564-RS	Transistor		
TR20~TR22	2SC828-RS	Transistor		
TR23,24	2SA564-RS	Transistor		
TR25,26	2SC828-RS	Transistor		
TR27	2SA564-RS	Transistor		
TR28	YUT2SK19-Y	Field Effect Transistor		
TR29	YUT2SK34-CD	Field Effect Transistor		
TR30	2SC828-RS	Transistor		
TR31,32	2SA564-RS	Transistor		
TR33	2SC1047-CD	Transistor		
TR34	2SC828-RS	Transistor		
TR35	2SA838BC	Transistor		
TR36	2SC1047-CD	Transistor		
TR37	2SA564-RS	Transistor		
TR38	2SA838BC	Transistor		
TR39	2SC1047-CD	Transistor		
TR40	2SA564-PQR	Transistor		
D1~3	MA162	Diode		
R1	ERD14FJ221	Carbon	220Ω	¼W
R2	ERD14FJ101	Carbon	100Ω	¼W
R3	ERD14FJ102	Carbon	1KΩ	¼W
R5	ERD14FJ102	Carbon	1KΩ	¼W
R6,7	ERD14FJ101	Carbon	100Ω	¼W
R8	ERD14FJ104	Carbon	100KΩ	¼W
R9	ERD14FJ222	Carbon	2.2KΩ	¼W
R10	ERD14FJ821	Carbon	820Ω	¼W
R11	ERD14FJ561	Carbon	560Ω	¼W
R12	ERD14FJ153	Carbon	15KΩ	¼W
R13	ERD14FJ122	Carbon	1.2KΩ	¼W
R14	ERD14FJ152	Carbon	1.5KΩ	¼W
R15	ERD14FJ681	Carbon	680Ω	¼W
R16	ERD14FJ331	Carbon	330Ω	¼W
R17	ERD25TJ271	Carbon	270Ω	⅛W
R18	ERD14FJ271	Carbon	270Ω	¼W
R19	ERD14FJ122	Carbon	1.2KΩ	¼W
R20	ERD14FJ271	Carbon	270Ω	¼W
R21	ERD14FJ102	Carbon	1KΩ	¼W
R22	ERD14FJ221	Carbon	220Ω	¼W
R23	ERD14FJ222	Carbon	2.2KΩ	¼W
R24	ERD14FJ562	Carbon	5.6KΩ	¼W
R25	ERD14FJ821	Carbon	820Ω	¼W
R26	ERD14FJ562	Carbon	5.6KΩ	¼W
R27	ERD14FJ222	Carbon	2.2KΩ	¼W
R28	ERD14FJ103	Carbon	10KΩ	¼W
R29	ERD14FJ122	Carbon	1.2KΩ	¼W
R30	ERD14FJ563	Carbon	56KΩ	¼W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R31	ERD14FJ105	Carbon	1MΩ	¼W
R32	ERD14FJ562	Carbon	5.6KΩ	¼W
R33,34	ERD14FJ124	Carbon	120KΩ	¼W
R35	ERD14FJ103	Carbon	10KΩ	¼W
R36	ERD14FJ221	Carbon	220Ω	¼W
R37	ERD14FJ182	Carbon	1.8KΩ	¼W
R38	ERD14FJ103	Carbon	10KΩ	¼W
R39	ERD25TJ221	Carbon	220Ω	¼W
R40	ERD14FJ182	Carbon	1.8KΩ	¼W
R41	ERD14FJ104	Carbon	100KΩ	¼W
R42	ERD14FJ222	Carbon	2.2KΩ	¼W
R43,44	ERD14FJ221	Carbon	220Ω	¼W
R45	ERD14FJ102	Carbon	1KΩ	¼W
R46	ERD14FJ222	Carbon	2.2KΩ	¼W
E47	ERD14FJ821	Carbon	820Ω	¼W
R48	ERD14FJ102	Carbon	1KΩ	¼W
R49	ERD14FJ153	Carbon	15KΩ	¼W
R50	ERD14FJ122	Carbon	1.2KΩ	¼W
R51	ERD14FJ681	Carbon	680Ω	¼W
R52,53	ERD14FJ271	Carbon	270Ω	¼W
R54	ERD14FJ122	Carbon	1.2KΩ	¼W
R55	ERD14FJ271	Carbon	270Ω	¼W
R56	ERD14FJ152	Carbon	1.5KΩ	¼W
R57~59	ERD14FJ681	Carbon	680Ω	¼W
R60	ERD14FJ471	Cabon	470Ω	¼W
R61	ERD14FJ563	Carbon	56KΩ	¼W
R62	ERD14FJ105	Carbon	1MΩ	¼W
R63	ERD14FJ562	Carbon	5.6KΩ	¼W
R64	ERD14FJ222	Carbon	2.2KΩ	¼W
R65	ERD14FJ222	Carbon	2.2KΩ	¼W
R66	ERD14FJ221	Carbon	220Ω	¼W
R67	ERD14FJ101	Carbon	100Ω	¼W
R68	ERD14FJ102	Carbon	1KΩ	¼W
R69	ERD14FJ221	Carbon	220Ω	¼W
R70	ERD14FJ102	Carbon	1KΩ	¼W
R71,72	ERD14FJ101	Carbon	100Ω	¼W
R73	ERD14FJ222	Carbon	2.2KΩ	¼W
R74	ERD14FJ562	Carbon	5.6KΩ	¼W
R75	ERD14FJ101	Carbon	100Ω	¼W
R76	ERD14FJ102	Carbon	1KΩ	¼W
R77	ERD14FJ101	Carbon	100Ω	¼W
R78	ERD14FJ102	Carbon	1KΩ	¼W
R79	ERD14FJ101	Carbon	100Ω	¼W
R80	ERD14FJ100	Carbon	10Ω	¼W
R81	ERD14FJ104	Carbon	100KΩ	¼W
R82	ERD14FJ182	Carbon	1.8KΩ	¼W
R83	ERD14FJ561	Carbon	560Ω	¼W
R84	ERD14FJ222	Carbon	2.2KΩ	¼W
R85	ERD14FJ821	Carbon	820Ω	¼W
R86	ERD14FJ562	Carbon	5.6KΩ	¼W
R87	ERD14FJ222	Carbon	2.2KΩ	¼W

SYMBOL NO.	PART NO.	DESCRIPTION		
R88	ERD14FJ103	Carbon	10KΩ	¼W
R89	ERD14FJ222	Carbon	2.2KΩ	¼W
R90	ERD14FJ102	Carbon	1KΩ	¼W
R92	ERD14FJ471	Carbon	470Ω	¼W
R93	ERD14FJ332	Carbon	3.3KΩ	¼W
R94	ERD14FJ221	Carbon	220Ω	¼W
R95	ERD14FJ333	Carbon	33KΩ	¼W
R97	ERD14FJ152	Carbon	1.5KΩ	¼W
R98	ERD14FJ562	Carbon	5.6KΩ	¼W
R99	ERD14FJ332	Carbon	3.3KΩ	¼W
R100	ERD14FJ821	Carbon	820Ω	¼W
R101	ERD14FJ332	Carbon	3.3KΩ	¼W
R102	ERD14FJ182	Carbon	1.8KΩ	¼W
R103	ERD14FJ222	Carbon	2.2KΩ	¼W
R104	ERD14FJ103	Carbon	10KΩ	¼W
R105	ERD14FJ222	Carbon	2.2KΩ	¼W
R106	ERD14FJ562	Carbon	5.6KΩ	¼W
R107	ERD14FJ222	Carbon	2.2KΩ	¼W
R108	ERD14FJ562	Carbon	5.6KΩ	¼W
R109	ERD14FJ182	Carbon	1.8KΩ	¼W
R110, R111	ERD14FJ102	Carbon	1KΩ	¼W
R112, R113	ERD14FJ561	Carbon	560Ω	¼W
R114	ERD14FJ222	Carbon	2.2KΩ	¼W
VR1	YWSR19R470B	Variable Resistor	470Ω	
VR2,3	YWSR19R1KB	Variable Resistor	1KΩ	
VR4~7	YWSR19R470B	Variable Resistor	470Ω	
VR8,9	YWSR19R2.2KB	Variable Resistor	2.2KΩ	
VR10~13	YWSR19R470B	Variable Resistor	470Ω	
VR14,15	YWSR19R2.2KB	Variable Resistor	2.2KΩ	
VR16	YWSR19R470B	Variable Resistor	470Ω	
VR17	YCVRJ6PK102B	Variable Resistor	1KΩ	
C1,2	ECCF1H680JC	Ceramic	68PF	50V
C3	ECQM1H223KZ	Polyester	0.022μF	50V
C4	ECCF1H270JC	Ceramic	27PF	50V
C5~8	ECEA16V10L	Electrolytic	10μF	16V
C10	ECEA16V10L	Electrolytic	10μF	16V
C11	ECEA25V3R3L	Electrolytic	3.3μF	25V
C13	ECEA10V47L	Electrolytic	47μF	10V
C14,15	ECQM1H102KZ	Polyester	0.001μF	50V
C16	ECQM1H223KZ	Polyester	0.022μF	50V
C17	ECCF1H270JC	Ceramic	27PF	50V
C18~23	ECEA16V10L	Electrolytic	10μF	16V
C24	ECEA25V3R3L	Electrolytic	3.3μF	25V
C25,26	ECEA16V10L	Electrolytic	10μF	16V
C27	ECEA10V47L	Electrolytic	47μF	10V

SYMBOL NO.	PART NO.	DESCRIPTION		
C29~31	ECCF1H680JC	Ceramic	68PF	50V
C33	ECQM1H223KZ	Polyester	0.022μF	50V
C34	ECCF1H270JC	Ceramic	27PF	50V
C35	ECEA16V10L	Electrolytic	10μF	16V
C36	ECEA16V10L	Electrolytic	10μF	16V
C37	ECEA16V10L	Electrolytic	10μF	16V
C39	ECCF1H020C	Ceramic	2PF	50V
C40	ECEA16V220L	Electrolytic	220μF	16V
C41	ECCF1H151JC	Ceramic	150PF	50V
C42	ECEA1CS470	Electrolytic	47μF	16V
L1~3	YSP0406L470K	Inductance	47μH	
TP1~5	*YWV8300FR06	Check Terminal (x5)		

YWJ5500EZK04

[Video Cross Point-2 Circuit Board]

SYMBOL NO.	PART NO.	DESCRIPTION		
PCB4	*YWJ5500EZK04	Printed Circuit Board Assembly		
IC1,2	YWMC14081BCP	Integrated Circuit		
IC3	YWMC14073BCP	Integrated Circuit		
IC4	YWMC14011BCP	Integrated Circuit		
IC5	*YWMC14174BCP	Integrated Circuit		
IC6	*YWMC14175BCP	Integrated Circuit		
IC7	*YWMC14013BCP	Integrated Circuit		
TR1~20	2SC828-RS	Transistor		
TR21~31	2SC1318-QR	Transistor		
TR32	2SC828-RS	Transistor		
D1~18	MA162	Diode		
R1	ERD18TJ103	Carbon	10KΩ	⅛W
R2	ERD18TJ221	Carbon	220Ω	⅛W
R3	ERD18TJ103	Carbon	10KΩ	⅛W
R4	ERD18TJ221	Carbon	220Ω	⅛W
R5	ERD18TJ103	Carbon	10KΩ	⅛W
R6	ERD18TJ221	Carbon	220Ω	⅛W
R7	ERD18TJ103	Carbon	10KΩ	⅛W
R8	ERD18TJ221	Carbon	220Ω	⅛W
R9	ERD18TJ103	Carbon	10KΩ	⅛W
R10	ERD18TJ221	Carbon	220Ω	⅛W
R11	ERD18TJ103	Carbon	10KΩ	⅛W
R12	ERD18TJ221	Carbon	220Ω	⅛W
R13	ERD18TJ103	Carbon	10KΩ	⅛W
R14	ERD18TJ221	Carbon	220Ω	⅛W
R15	ERD18TJ103	Carbon	10KΩ	⅛W
R16	ERD18TJ221	Carbon	220Ω	⅛W
R17,18	ERD18TJ103	Carbon	10KΩ	⅛W
R19	ERD18TJ102	Carbon	1KΩ	⅛W
R20	ERD18TJ221	Carbon	220Ω	⅛W
R21	ERD18TJ102	Carbon	1KΩ	⅛W
R22	ERD18TJ563	Carbon	56KΩ	⅛W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R23	ERD18TJ472	Carbon	4.7KΩ	⅛W
R24	ERD18TJ103	Carbon	10KΩ	⅛W
R25	ERD18TJ563	Carbon	56KΩ	⅛W
R26,27	ERD18TJ153	Carbon	15KΩ	⅛W
R28	ERD18TJ562	Carbon	5.6KΩ	⅛W
R29	ERD18TJ102	Carbon	1KΩ	⅛W
R30~50	ERD18TJ103	Carbon	10KΩ	⅛W
R51'	ERD12FJ181	Carbon	180Ω	½W
R52	ERD18TJ103	Carbon	10KΩ	⅛W
R53,54	ERD18TJ153	Carbon	15KΩ	⅛W
R55	ERD18TJ562	Carbon	5.6KΩ	⅛W
R56	ERD18TJ563	Carbon	56KΩ	⅛W
C1	ECEB1ES4R7L	Electrolytic	4.7μF	25V
C2	ECEA1CS101	Electrolytic	100μF	16V
C3	ECEA1CS100	Electrolytic	10μF	16V
SW1~10	Y9FL2EC0421A	Video Selector Switch		
PL1~10	YW6200230500	Lamp		
M19	*YWJ5500FR02A	Diside Position Bracket (x2)		

YWJ5500ZK05
[Waveform Generator Circuit Board]

SYM-BOL NO.	PART NO.	DESCRIPTION		
PCB5	*YWJ5500ZK05	Printed Circuit Board Assembly		
TR1	2SC828-RS	Transistor		
TR2	2SA564-RS	Transistor		
TR3~7	2SC828-RS	Transistor		
TR8	2SA564-RS	Transistor		
TR9	2SC828-RS	Transistor		
TR10	2SA564-RS	Transistor		
TR11~16	2SC828-RS	Transistor		
TR17	2SA564-RS	Transistor		
TR18~20	2SC828-RS	Transistor		
TR21	2SA564-RS	Transistor		
TR22	2SC828-RS	Transistor		
TR23	2SA564-RS	Transistor		
TR24~27	2SC828-RS	Transistor		
D1~24	MA162	Diode		
D25	YUDXZ-051	Diode		
D26	MA162	Diode		
R1~4	ERD14FJ103	Carbon	10KΩ	¼W
R5	ERD14FJ222	Carbon	2.2KΩ	¼W
R6	ERD14FJ152	Carbon	1.5KΩ	¼W
R7	ERD14FJ123	Carbon	12KΩ	¼W
R8	ERD14FJ122	Carbon	1.2KΩ	¼W
R9	ERD14FJ123	Carbon	12KΩ	¼W
R10	ERD14FJ221	Carbon	220Ω	¼W
R11	ERD14FJ562	Carbon	5.6KΩ	¼W
R12	ERD14FJ821	Carbon	820Ω	¼W
R13	ERD14FJ222	Carbon	2.2KΩ	¼W
R14	ERD14FJ273	Carbon	27KΩ	¼W
R15	ERD14FJ153	Carbon	15KΩ	¼W
R16,17	ERD14FJ221	Carbon	220Ω	¼W
R18~20	ERD14FJ562	Carbon	5.6KΩ	¼W
R21~23	ERD14FJ471	Carbon	470Ω	¼W
R24	ERD14FJ562	Carbon	5.6KΩ	¼W
R25	ERD14FJ472	Carbon	4.7KΩ	¼W
R26	ERD14FJ560	Carbon	56Ω	¼W
R27	ERD14FJ681	Carbon	680Ω	¼W
R28	ERD14FJ272	Carbon	2.7KΩ	¼W
R29	ERD14FJ562	Carbon	5.6KΩ	¼W
R30	ERD14FJ103	Carbon	10KΩ	¼W
R31,32	ERD14FJ332	Carbon	3.3KΩ	¼W
R33	ERD14FJ103	Carbon	10KΩ	¼W
R34	ERD14FJ332	Carbon	3.3KΩ	¼W
R35	ERD14FJ103	Carbon	10KΩ	¼W
R36	ERD14FJ332	Carbon	3.3KΩ	¼W
R37	ERD14FJ103	Carbon	10KΩ	¼W
R38	ERD14FJ821	Carbon	820Ω	¼W
R39	ERD14FJ332	Carbon	3.3KΩ	¼W
R40	ERD14FJ101	Carbon	100Ω	¼W
R41	ERD14FJ332	Carbon	3.3KΩ	¼W
R42	ERD14FJ101	Carbon	100Ω	¼W
R43	ERD14FJ562	Carbon	5.6KΩ	¼W
R44	ERD14FJ272	Carbon	2.7KΩ	¼W
R45	ERD14FJ152	Carbon	1.5KΩ	¼W
R46	ERD14FJ123	Carbon	12KΩ	¼W
R47	ERD14FJ221	Carbon	220Ω	¼W
R48	ERD14FJ332	Carbon	3.3KΩ	¼W
R49	ERD14FJ221	Carbon	220Ω	¼W
R50	ERD14FJ472	Carbon	4.7KΩ	¼W
R51	ERD14FJ821	Carbon	820Ω	¼W
R52	ERD14FJ471	Carbon	470Ω	¼W
R53,54	ERD14FJ562	Carbon	5.6KΩ	¼W
R55	ERD14FJ391	Carbon	390Ω	¼W
R56	ERD14FJ681	Carbon	680Ω	¼W
R57	ERD14FJ471	Carbon	470Ω	¼W
R58,59	ERD14FJ562	Carbon	5.6KΩ	¼W
R60	ERD14FJ680	Carbon	68Ω	¼W
R61	ERD14FJ152	Carbon	1.5KΩ	¼W
R62	ERD14FJ562	Carbon	5.6KΩ	¼W
R63	ERD14FJ103	Carbon	10KΩ	¼W
R64	ERD14FJ332	Carbon	3.3KΩ	¼W
R65	ERD14FJ103	Carbon	10KΩ	¼W
R66	ERD14FJ332	Carbon	3.3KΩ	¼W
R67	ERD14FJ103	Carbon	10KΩ	¼W
R68	ERD14FJ332	Carbon	3.3KΩ	¼W
R69	ERD14FJ821	Carbon	820Ω	¼W
R70	ERD14FJ391	Carbon	390Ω	¼W
VR1~4	YWSR19R1KB	Variable Resistor	1KΩ	

SYMBOL NO.	PART NO.	DESCRIPTION		
VR5	YWSR19R2.2KB	Variable Resistor	2.2KΩ	
VR6	YWSR19R1KB	Variable Resistor	1KΩ	
VR7	YWSR19R2.2KB	Variable Resistor	2.2KΩ	
VR8	YWSR19R1KB	Variable Resistor	1KΩ	
VR9	YWSR19R1KB	Variable Resistor	1KΩ	
VR10,11	YWSR19R1KB	Variable Resistor	1KΩ	
C1	ECQM1H333KZ	Polyester	0.033μF	50V
C2	ECSZ16EFR47Q	Tantalum	0.47μF	16V
C3	ECEA1CS100	Electrolytic	10μF	16V
C4~6	ECEA1AS470	Electrolytic	47μF	10V
C7,8	ECSZ16EF4R7Q	Tantalum	4.7μF	16V
C9	ECEA1AS470	Electrolytic	47μF	10V
C10,11	ECSZ16EF4R7Q	Tantalum	4.7μF	16V
C12	ECEA1CS470	Electrolytic	47μF	16V
C13	ECEA1CS101	Electrolytic	100μF	16V
C14	ECCD1H330K	Ceramic	33PF	50V
C15	ECEA1CS100	Electrolytic	10μF	16V
C16	ECQM1H103KZ	Polyester	0.01μF	50V
C17	ECEA1CS100	Electrolytic	10μF	16V
C18,19	ECQM1H103KZ	Polyester	0.01μF	50V
C20	ECEA1CS100	Electrolytic	10μF	16V
C21,22	ECQM1H103KZ	Polyester	0.01μF	50V
C23	ECEA1CS100	Electrolytic	10μF	16V
C24	ECQM1H102KZ	Polyester	0.001μF	50V
SW1~9	YW9FL1EC04201	Wipe Mode Selector Switch		
PL1~9	YW6200120500	Lamp (x9)		
M19	YWJ5500FR02A	Deside Position Bracket (x2)		

YWJ5500ZK06
[Waveform Processor/Positioner Circuit Board]

SYMBOL NO.	PART NO.	DESCRIPTION		
PCB6	*YWJ5500ZK06	Printed Circuit Board Assembly		
IC1	DN850	Integrated Circuit		
IC2	*YWMC14077BCP	Integrated Circuit		
IC3	DN850	Integrated Circuit		
TR1	2SA564-RS	Transistor		
TR2	2SA564-RS	Transistor		
TR4~6	2SC828-RS	Transistor		
TR7	2SA564-RS	Transistor		
TR8~18	2SC828-RS	Transistor		
TR19	2SA564-RS	Transistor		
TR20	2SA564-RS	Transistor		
TR21,22	2SC828-RS	Transistor		
TR23	2SA564-RS	Transistor		
TR24~26	2SC828-RS	Transistor		
TR27,28	2SC1958	Transistor		
TR29~36	2SC828-RS	Transistor		
TR37	2SA564-RS	Transistor		
TR38~40	2SC828-RS	Transistor		
D1~23	MA162	Diode		
R1	ERD14FJ473	Carbon	47KΩ	¼W
R2	ERD25VJ822	Carbon	8.2KΩ	¼W
R3	ERD14FJ222	Carbon	2.2KΩ	¼W
R4	ERD14FJ103	Carbon	10KΩ	¼W
R5	ERD14FJ562	Carbon	5.6KΩ	¼W
R6	ERD14FJ152	Carbon	1.5KΩ	¼W
R7,8	ERD14FJ822	Carbon	8.2KΩ	¼W
R9	ERD14FJ153	Carbon	15KΩ	¼W
R10	ERD14FJ103	Carbon	10KΩ	¼W
R11	ERD14FJ563	Carbon	56KΩ	¼W
R12	ERD14FJ223	Carbon	22KΩ	¼W
R13	ERD14FJ123	Carbon	12KΩ	¼W
R14,15	ERD14FJ821	Carbon	820Ω	¼W
R16	ERD14FJ223	Carbon	22KΩ	¼W
R17	ERD14FJ123	Carbon	12KΩ	¼W
R18	ERD14FJ102	Carbon	1KΩ	¼W
R19,20	ERD14FJ103	Carbon	10KΩ	¼W
R21	ERD14FJ821	Carbon	820Ω	¼W
R22	ERD14FJ471	Carbon	470Ω	¼W
R23	ERD14FJ122	Carbon	1.2KΩ	¼W
R24	ERD14FJ332	Carbon	3.3KΩ	¼W
R25	ERD14FJ821	Carbon	820Ω	¼W
R26	ERD14FJ681	Carbon	680Ω	¼W
R27	ERD14FJ222	Carbon	2.2KΩ	¼W
R28	ERD14FJ273	Carbon	27KΩ	¼W
R29	ERD14FJ221	Carbon	220Ω	¼W
R30	ERD14FJ102	Carbon	1KΩ	¼W
R31,32	ERD14FJ103	Carbon	10KΩ	¼W
R33	ERD14FJ332	Carbon	3.3KΩ	¼W
R34	ERD14FJ821	Carbon	820Ω	¼W
R35	ERD14FJ562	Carbon	5.6KΩ	¼W
R36	ERD14FJ102	Carbon	1KΩ	¼W
R37	ERD14FJ103	Carbon	10KΩ	¼W
R38	ERD14FJ152	Carbon	1.5KΩ	¼W
R39	ERD14FJ103	Carbon	10KΩ	¼W
R40,41	ERD14FJ153	Carbon	15KΩ	¼W
R42,43	ERD14FJ103	Carbon	10KΩ	¼W
R44,45	ERD14FJ152	Carbon	1.5KΩ	¼W
R46,47	ERD14FJ103	Carbon	10KΩ	¼W
R48,49	ERD14FJ153	Carbon	15KΩ	¼W
R50	ERD14FJ103	Carbon	10KΩ	¼W
R51,52	ERD14FJ222	Carbon	2.2KΩ	¼W
R53	ERD14FJ562	Carbon	5.6KΩ	¼W
R54	ERD14FJ103	Carbon	10KΩ	¼W
R55	ERD14FJ152	Carbon	1.5KΩ	¼W
R56	ERD14FJ473	Carbon	47KΩ	¼W
R57	ERD14FJ103	Carbon	10KΩ	¼W
R58	ERD14FJ222	Carbon	2.2KΩ	¼W

SYMBOL NO.	PART NO.	DESCRIPTION		
R59,60	ERD14FJ682	Carbon	6.8KΩ	¼W
R61	ERD14FJ153	Carbon	15KΩ	¼W
R62	ERD14FJ102	Carbon	1KΩ	¼W
R63	ERD14FJ223	Carbon	22KΩ	¼W
R64	ERD14FJ123	Carbon	12KΩ	¼W
R65,66	ERD14FJ821	Carbon	820Ω	¼W
R67	ERD14FJ223	Carbon	22KΩ	¼W
R68	ERD14FJ123	Carbon	12KΩ	¼W
R69	ERD14FJ102	Carbon	1KΩ	¼W
R70,71	ERD14FJ103	Carbon	10KΩ	¼W
R72	ERD14FJ821	Carbon	820Ω	¼W
R73	ERD14FJ471	Carbon	470Ω	¼W
R74	ERD14FJ122	Carbon	1.2KΩ	¼W
R75	ERD14FJ222	Carbon	2.2KΩ	¼W
R76	ERD14FJ563	Carbon	56KΩ	¼W
R77,78	ERD14FJ103	Carbon	10KΩ	¼W
R79	ERD14FJ102	Carbon	1KΩ	¼W
R80	ERD14FJ221	Carbon	220Ω	¼W
R81	ERD14FJ332	Carbon	3.3KΩ	¼W
R82	ERD14FJ681	Carbon	680Ω	¼W
R83	ERD14FJ562	Carbon	5.6KΩ	¼W
R84	ERD14FJ102	Carbon	1KΩ	¼W
R85~86	ERD14FJ103	Carbon	10KΩ	¼W
R87	ERD14FJ222	Carbon	2.2KΩ	¼W
R88,89	ERD14FJ103	Carbon	10KΩ	¼W
R90	ERD14FJ152	Carbon	1.5KΩ	¼W
R91	ERD14FJ103	Carbon	10KΩ	¼W
R92	ERD14FJ222	Carbon	2.2KΩ	¼W
R93~96	ERD14FJ103	Carbon	10KΩ	¼W
R97	ERD14FJ222	Carbon	2.2KΩ	¼W
R98,99	ERD14FJ103	Carbon	10KΩ	¼W
R100	ERD14FJ332	Carbon	3.3KΩ	¼W
R101	ERD14FJ222	Carbon	2.2KΩ	¼W
R102,103	ERD14FJ562	Carbon	5.6KΩ	¼W
R104	ERD14FJ103	Carbon	10KΩ	¼W
R105	ERD14FJ102	Carbon	1KΩ	¼W
R106	ERD14FJ222	Carbon	2.2KΩ	¼W
R107	ERD14FJ470	Carbon	47Ω	¼W
R108	ERD14FJ562	Carbon	5.6KΩ	¼W
VR1~6	YCVRJ6PK503K	Variable Resistor	50KΩ	
C1	ECSZ10ER10Q	Tantalume	10μF	10V
C2	ECEA25V47L	Electrolytic	47μF	25V
C3~5	ECSZ16EFR47Q	Tantalum	0.47μF	16V
C6	ECCD1H101K	Ceramic	100PF	50V
C7,8	ECEA1AS470	Electrolytic	47μF	10V
C9	ECEA1CS101	Electrolytic	100μF	16V
C10	ECSZ10EF22Q	Tantalum	22μF	10V
C11,12	ECQM1H222KZ	Polyester	0.0022μF	50V
C13	ECEA1ES100	Electrolytic	10μF	25V
C14	ECCF1H101K	Ceramic	100PF	50V
C15	ECEA1CS470	Electrolytic	47μF	16V
C16	ECSZ10EF10Q	Tantalum	10μF	10V
C17~19	ECQM1H222KZ	Polyester	0.0022μF	50V
C20	ECQM1H102KZ	Polyester	0.001μF	50V
C21,22	ECEA1CS100	Electrolytic	10μF	16V
C23	ECSZ10EF22Q	Tantalum	22μF	10V
C24	ECCF1H101K	Ceramic	100PF	50V
C25	ECCF1H271K	Ceramic	270PF	50V
C26	ECEA1CS101	Electrolytic	100μF	16V

SYMBOL NO.	PART NO.	DESCRIPTION		
C27	ECSZ10EFR47Q	Tantalum	0.47μF	10V
C28	ECQM1H333KZ	Polyester	0.033μF	50V
C29	ECEA1CS330	Electrolytic	33μF	16V
C30	ECCF1H121K	Ceramic	120pF	50V
C31	ECQM1H102KZ	Polyester	0.001μF	50V
L1	YSP0406L470K	Inductance	47μH	
SW1~8	YW8FL2EC0421	Wipe Key Selector Switch		
PL1~8	YW6200120500	Lamp (x8)		
TL1~5	YWV8300FR06	Check Terminal (x5)		
M19	*YWJ5500FR02A	Deside Position Bracket (x2)		

YWJ5500EZK07

[Preview · Program Output Circuit Board]

SYMBOL NO.	PART NO.	DESCRIPTION		
PCB7	*YWJ5500EZK07	Printed Circuit Board Assembly		
IC1	AN904	Integrated Circuit		
TR1	YUT2SK34-CD	Field Effect Transistor		
TR2	YUT2SK19-Y	Field Effect Transistor		
TR3	2SC828-RS	Transistor		
TR4	2SA838BC	Transistor		
TR5,6	2SC1047-CD	Transistor		
TR7	2SC828-RS	Transistor		
TR8	2SC1383-PQ	Transistor		
TR9	2SA564-RS	Transistor		
TR10	2SC828-RS	Transistor		
TR11,12	2SC1958	Transistor		
TR13,14	2SC828-RS	Transistor		
TR15	YUT2SK34-CD	Field Effect Transistor		
TR16,17	2SC828-RS	Transistor		
TR18	2SA838BC	Transistor		
TR20	2SC828-RS	Transistor		
TR21	YUT2SK34-CD	Field Effect Transistor		
TR22	YUT2SK19-Y	Field Effect Transistor		
TR23	2SC828-RS	Transistor		
TR24	2SA564-RS	Transistor		
TR25	2SC1047CD	Transistor		
TR26~28	2SC828-RS	Transistor		
TR29,30	2SA564-RS	Transistor		
TR31	2SC828-RS	Transistor		
TR32	2SA838BC	Transistor		
TR33,34	2SC1047-CD	Transistor		
TR35,36	2SC828-RS	Transistor		
TR37	2SC1383-PQ	Transistor		
TR38	2SA683-PQ	Transistor		
TR39	2SA564-RS	Transistor		
TR40	2SC828-RS	Transistor		
TR41	2SA564-RS	Transistor		
D1~5	MA162	Diode		
R1	ERD14FJ104	Carbon	100KΩ	¼W
R2	ERD14FJ272	Carbon	2.7KΩ	¼W
R3	ERD14FJ122	Carbon	1.2KΩ	¼W
R4	ERD14FJ222	Carbon	2.2KΩ	¼W
R5	ERD14FJ821	Carbon	820Ω	¼W
R6	ERD14FJ222	Carbon	2.2KΩ	¼W
R7	ERD14FJ562	Carbon	5.6KΩ	¼W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R8	ERD14FJ560	Carbon	56Ω	¼W
R9	ERD14FJ122	Carbon	1.2KΩ	¼W
R10	ERD14FJ332	Carbon	3.3KΩ	¼W
R11	ERD14FJ101	Carbon	100Ω	¼W
R12	ERD14FJ332	Carbon	3.3KΩ	¼W
R13	ERD14FJ821	Carbon	820Ω	¼W
R14	ERD14FJ560	Carbon	56Ω	¼W
R15	ERD14FJ272	Carbon	2.7KΩ	¼W
R16	ERD14FJ122	Carbon	1.2KΩ	¼W
R17	ERD14FJ153	Carbon	15KΩ	¼W
R18	ERD14FJ223	Carbon	22KΩ	¼W
R19	ERD14FJ101	Carbon	100Ω	¼W
R20	ERD12FJ681	Carbon	680Ω	½W
R21	ERD14FJ273	Carbon	27KΩ	¼W
R22	ERD14FJ123	Carbon	12KΩ	¼W
R23	ERD14FJ101	Carbon	100Ω	¼W
R24~26	ERD14FJ222	Carbon	2.2KΩ	¼W
R27	ERD14FJ562	Carbon	5.6KΩ	¼W
R28	ERD14FJ562	Carbon	5.6KΩ	¼W
R29,30	ERD14FJ223	Carbon	22KΩ	¼W
R31	ERD14FJ222	Carbon	2.2KΩ	¼W
R32	ERD14FJ331	Carbon	330Ω	¼W
R33	ERD14FJ121	Carbon	120Ω	¼W
R34	ERD14FJ393	Carbon	39KΩ	¼W
R35	ERD14FJ223	Carbon	22KΩ	¼W
R36	ERD14FJ101	Carbon	100Ω	¼W
R37	ERD14FJ222	Carbon	2.2KΩ	¼W
R38	ERD14FJ104	Carbon	100KΩ	¼W
R39	ERD14FJ152	Carbon	1.5KΩ	¼W
R40	ERD14FJ153	Carbon	15KΩ	¼W
R41	ERD14FJ222	Carbon	2.2KΩ	¼W
R42	ERD14FJ102	Carbon	1KΩ	¼W
R43	ERD14FJ821	Carbon	820Ω	¼W
R44	ERD14FJ562	Carbon	5.6KΩ	¼W
R45	ERD14FJ104	Carbon	100KΩ	¼W
R46	ERD14FJ562	Carbon	5.6KΩ	¼W
R47	ERD14FJ104	Carbon	100KΩ	¼W
R48	ERD14FJ562	Carbon	5.6KΩ	¼W
R49	ERD14FJ821	Carbon	820Ω	¼W
R50	ERD14FJ222	Carbon	2.2KΩ	¼W
R51	ERD14FJ222	Carbon	2.2KΩ	¼W
R52	ERD14FJ102	Carbon	1KΩ	¼W
R53	ERD14FJ682	Carbon	6.8KΩ	¼W
R54	ERD14FJ332	Carbon	3.3KΩ	¼W
R56	ERD14FJ152	Carbon	1.5KΩ	¼W
R57	ERD14FJ152	Carbon	1.5KΩ	¼W
R58	ERD25TJ222	Carbon	2.2KΩ	¼W
R59	ERD14FJ271	Carbon	270Ω	¼W
R60	ERD25TJ271	Carbon	270Ω	¼W
R61	ERD14FJ681	Carbon	680Ω	¼W
R62	ERD14FJ331	Carbon	330Ω	¼W
R63	ERD14FJ152	Carbon	1.5KΩ	¼W
R64	ERD14FJ101	Carbon	100Ω	¼W
R65	ERD14FJ222	Carbon	2.2KΩ	¼W
R66	ERD14FJ562	Carbon	5.6KΩ	¼W
R67	ERD14FJ821	Carbon	820Ω	¼W
R68	ERD14FJ332	Carbon	3.3KΩ	¼W
R69	ERD14FJ682	Carbon	6.8KΩ	¼W
R70	ERD14FJ102	Carbon	1KΩ	¼W
R71	ERD14FJ223	Carbon	22KΩ	¼W
R72	ERD14FJ103	Carbon	10KΩ	¼W
R73	ERD14FJ223	Carbon	22KΩ	¼W
R74	ERD14FJ222	Carbon	2.2KΩ	¼W
R75	ERD14FJ102	Carbon	1KΩ	¼W
R76	ERD14FJ223	Carbon	22KΩ	¼W
R77	ERD14FJ153	Carbon	15KΩ	¼W
R78	ERD14FJ152	Carbon	1.5KΩ	¼W
R79	ERD14FJ332	Carbon	3.3KΩ	¼W
R80	ERD14FJ152	Carbon	1.5KΩ	¼W
R81	ERD14FJ151	Carbon	150Ω	¼W
R82	ERD14FJ332	Carbon	3.3KΩ	¼W
R83	ERD14FJ221	Carbon	220Ω	¼W
R84	ERD14FJ682	Carbon	6.8KΩ	¼W
R85	ERD14FJ332	Carbon	3.3KΩ	¼W
R86	ERD14FJ561	Carbon	560Ω	¼W
R87	ERD14FJ222	Carbon	2.2KΩ	¼W
R88	ERD14FJ562	Carbon	5.6KΩ	¼W
R89	ERD14FJ560	Carbon	56Ω	¼W
R90	ERD14FJ562	Carbon	5.6KΩ	¼W
R91	ERD14FJ122	Carbon	1.2KΩ	¼W
R92	ERD14FJ332	Carbon	3.3KΩ	¼W
R93	ERD14FJ182	Carbon	1.8KΩ	¼W
R94	ERD14FJ560	Carbon	56Ω	¼W
R95	ERD14FJ103	Carbon	1.0KΩ	¼W
R96	ERD14FJ221	Carbon	220Ω	¼W
R97	ERD14FJ222	Carbon	2.2KΩ	¼W
R98	ERD14FJ122	Carbon	1.2KΩ	¼W
R99	ERD14FJ183	Carbon	18KΩ	¼W
R100	ERD14FJ223	Carbon	22KΩ	¼W
R101	ERD14FJ221	Carbon	220Ω	¼W
R102	ERD14FJ560	Carbon	56Ω	¼W
R103	ERD14FJ222	Carbon	2.2KΩ	¼W
R104, 105	ERD14FJ101	Carbon	100Ω	¼W
R106, 107	ERD14FJ100	Carbon	10Ω	¼W
R108	ERD14FJ103	Carbon	10KΩ	¼W
R109	ERD14FJ222	Carbon	2.2KΩ	¼W
R110	ERD14FJ332	Carbon	3.3KΩ	¼W
R111	ERD14FJ123	Carbon	12KΩ	¼W
R112	ERD14FJ332	Carbon	3.3KΩ	¼W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R113,114	ERD14FJ681	Carbon	680Ω	¼W
R115	ERD14FJ221	Carbon	220Ω	¼W
R116	ERD14FJ103	Carbon	10KΩ	¼W
R117	ERD14FJ182	Carbon	1.8KΩ	¼W
VR1,2	YWSR19R470B	Variable Resistor	470Ω	
VR3	YWSR19R4.7KB	Variable Resistor	4.7KΩ	
VR4	YWSR19R220B	Variable Resistor	220Ω	
VR5	YWSR19R4.7KB	Variable Resistor	4.7KΩ	
VR6	YWSR19R1KB	Variable Resistor	1KΩ	
VR7	YWSR19R3.3KB	Variable Resistor	3.3KΩ	
VR8	YWSR19R470B	Variable Resistor	470Ω	
VR9	YWSR19R4.7KB	Variable Resistor	4.7KΩ	
VR10	YWSR19R10KB	Variable Resistor	10KΩ	
VR11,12	YCVRJ6PK202B	Variable Resistor	2KΩ	
C1	ECQM1H223KZ	Polyester	0.022μF	50V
C2	ECCF1H270JC	Ceramic	27PF	50V
C3	ECEA1CS100	Electrolytic	10μF	16V
C4	ECEA1CS330	Electrolytic	33μF	16V
C5	EVC1ZW20X32	Variable Capacity	20P	
C6	ECCF1H020C	Ceramic	2PF	50V
C7	ECEA1AS101	Electrolytic	100μF	10V
C8	ECEA1CS101	Electrolytic	100μF	16V
C9	ECEA1CS470	Electrolytic	47μF	16V
C10	ECEA1ES470	Electrolytic	47μF	25V
C11~13	ECQM1H103KZ	Polyester	0.01μF	50V
C14	ECCF1H270JC	Ceramic	27PF	50V
C15	ECQM1H103KZ	Polyester	0.01μF	50V
C16	ECKF1H473ZF	Ceramic	0.047μF	50V
C17	ECQM1H223KZ	Polyester	0.022μF	50V
C18	ECEA1AS470	Electrolytic	47μF	10V
C19	ECEA1CS330	Electrolytic	33μF	16V
C20	ECQM1H223KZ	Polyester	0.022μF	50V
C21	ECCF1H270JC	Ceramic	27PF	50V
C22~25	ECEA1CS100	Electrolytic	10μF	16V
C26	ECCF1H151K	Ceramic	150PF	50V
C27	ECEA1CS100	Electrolytic	10μF	16V
C28	ECEA1ES470	Electrolytic	47μF	25V
C29	ECCF1H390JC	Ceramic	39PF	50V
C30	ECEA1CS101	Electrolytic	100μF	16V
C31	ECEA1CS100	Electrolytic	10μF	16V
C33	ECCF1H020C	Ceramic	2PF	50V
C34	ECV1ZW20X32	Variable Capacity	20PF	
C35	ECEA1AS101	Electrolytic	100μF	10V
C36	ECEA1AS470	Electrolytic	47μF	10V
C37	ECEA1ES470	Electrolytic	47μF	25V
C38	ECEA1CS470	Electrolytic	47μF	16V
C39	ECEA1AS101	Electrolytic	100μF	10V
C40	ECCF1H030C	Ceramic	3PF	50V
C41	ECCF1H050C	Ceramic	5PF	50V
C42	ECQM1H272KZ	Polyester	0.0027μF	50V

SYM-BOL NO.	PART NO.	DESCRIPTION		
L1	YSP0406L470K	Inductance	47μH	
L2	YSP0406L100K	Inductance	10μH	
L3, 4	YSP0406L470K	Inductance	47μH	
TP1~6	YWV8300FR06	Check Terminal	(x6)	

YWJ5500EZK08
[Subcarrier Circuit Board]

SYM-BOL NO.	PART NO.	DESCRIPTION		
PCB8	*YWJ5500EZK08	Printed Circuit Board Assembly		
IC1	AN-236	Integrated Circuit		
IC2	YWMC14053BCP	Integrated Circuit		
IC3	YWMC14528BCP	Integrated Circuit		
Q1~4	2SC828-RS	Transistor		
Q5	2SA564-RS	Transistor		
Q6~9	2SC828-RS	Transistor		
Q10,11	2SC1047-CD	Transistor		
Q12	2SA564-RS	Transistor		
Q13	2SC1047-CD	Transistor		
Q14	2SC1215-ST	Transistor		
Q15~17	2SC828-RS	Transistor		
Q18	2SC1318-RS	Transistor		
Q19	2SA720-RS	Transistor		
Q20	2SC828-RS	Transistor		
Q21,22	2SA564-RS	Transistor		
Q24	2SC828-RS	Transistor		
Q25	2SC1318-RS	Transistor		
Q26	2SA720-RS	Transistor		
D1,2	MA26T	Diode		
X1	YWHC18U4R4M	Crystal		
R1, 2	ERD25FJ272	Carbon	2.7KΩ	¼W
R3	ERD25FJ332	Carbon	3.3KΩ	¼W
R4	ERD25FJ102	Carbon	1KΩ	¼W
R5	ERD25FJ223	Carbon	22KΩ	¼W
R6	ERD25FJ103	Carbon	10KΩ	¼W
R7	ERD25FJ222	Carbon	2.2KΩ	¼W
R8, 9	ERD25FJ561	Carbon	560Ω	¼W
R10	ERD25FJ562	Carbon	5.6KΩ	¼W
R11	ERD25FJ181	Carbon	180Ω	¼W
R12	ERD25FJ103	Carbon	10KΩ	¼W
R13	ERD25FJ223	Carbon	22KΩ	¼W
R14	ERD25FJ561	Carbon	560Ω	¼W
R15	ERD25FJ102	Carbon	1KΩ	¼W
R16,17	ERD25FJ153	Carbon	15KΩ	¼W
R18	ERD25FJ102	Carbon	1KΩ	¼W
R19	ERD25FJ392	Carbon	3.9KΩ	¼W
R20	ERD25FJ103	Carbon	10KΩ	¼W
R21	ERD25FJ272	Carbon	2.7KΩ	¼W
R22	ERD25FJ183	Carbon	18KΩ	¼W
R23	ERD25FJ103	Carbon	10KΩ	¼W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R24	ERD25FJ681	Carbon	680Ω	¼W
R25	ERD25FJ471	Carbon	470Ω	¼W
R26	ERD25FJ681	Carbon	680Ω	¼W
R27	ERD25FJ471	Carbon	470Ω	¼W
R28	ERD25FJ821	Carbon	820Ω	¼W
R29,30	ERD25FJ123	Carbon	12KΩ	¼W
R31	ERD25FJ391	Carbon	390Ω	¼W
R32	ERD25FJ222	Carbon	2.2KΩ	¼W
R33,34	ERD25FJ561	Carbon	560Ω	¼W
R35	ERD25FJ392	Carbon	3.9KΩ	¼W
R36	ERD25FJ471	Carbon	470Ω	¼W
R37	ERD25FJ750	Carbon	75Ω	¼W
R38	ERD25FJ392	Carbon	3.9KΩ	¼W
R39	ERD25FJ151	Carbon	150Ω	¼W
R40,41	ERD25FJ153	Carbon	15KΩ	¼W
R42	ERD25FJ122	Carbon	1.2KΩ	¼W
R43	ERD25FJ221	Carbon	220Ω	¼W
R44	ERD25FJ271	Carbon	270Ω	¼W
R45	ERD25FJ562	Carbon	5.6KΩ	¼W
R46	ERD25FJ332	Carbon	3.3KΩ	¼W
R47	ERD25FJ682	Carbon	6.8KΩ	¼W
R48	ERD25FJ681	Carbon	680Ω	¼W
R49	ERD25FJ821	Carbon	820Ω	¼W
R50	ERD25FJ682	Carbon	6.8KΩ	¼W
R51	ERD25FJ681	Carbon	680Ω	¼W
R52	ERD25FJ103	Carbon	10KΩ	¼W
R53	ERD25FJ333	Carbon	33KΩ	¼W
R54	ERD25FJ822	Carbon	8.2KΩ	¼W
R55	ERD25FJ181	Carbon	180Ω	¼W
R56,57	ERD25FJ562	Carbon	5.6KΩ	¼W
R58,59	ERD25FJ2R2	Carbon	2.2Ω	¼W
R60	ERD25FJ104	Carbon	100KΩ	¼W
R61	ERD25FJ153	Carbon	15KΩ	¼W
R62,63	ERD25FJ472	Carbon	4.7KΩ	¼W
R64	ERD25FJ104	Carbon	100KΩ	¼W
R65,66	ERD25FJ682	Carbon	6.8KΩ	¼W
R67	ERD25FJ332	Carbon	3.3KΩ	¼W
R68	ERD25FJ560	Carbon	56Ω	¼W
R72	ERD25FJ333	Carbon	33KΩ	¼W
R73	ERD25FJ822	Carbon	8.2KΩ	¼W
R74	ERD25FJ560	Carbon	56Ω	¼W
R75,76	ERD25FJ562	Carbon	5.6KΩ	¼W
R77,78	ERD25FJ220	Carbon	22Ω	¼W
R79	ERD25FJ104	Carbon	100KΩ	¼W
VR1	YWH0621A4R7K	Variable Resistor	4.7KΩ	
VR2	EWKE1AS15A23	Variable Resistor	2KΩ	
VR3	YWH0021A1K	Variable Resistor	1KΩ	
VR4	YWH0621A4R7K	Variable Resistor	4.7KΩ	
VR5	WHS512A470B	Variable Resistor	470Ω	
C1, 2	ECQM1H103KZ	Polyester	0.01µF	50V
C3	ECKF1H821KB	Ceramic	820PF	50V
C4	ECCF1H270JC	Ceramic	27PF	50V
C5	ECQM1H103KZ	Polyester	0.01µF	50V
C6	ECQM1H222KZ	Polyester	0.0022µF	50V
C7~10	ECQM1H103KZ	Polyester	0.01µF	50V
C11	ECCF1H221JC	Ceramic	220PF	50V
C12	ECQM1H222KZ	Polyester	0.0022µF	50V
C13	ECEA1CS470	Electrolytic	47µF	16V
C14	ECEA1HS010	Electrolytic	1µF	50V
C15	ECEA1CS100	Electrolytic	10µF	16V
C16	ECQM1H102KZ	Polyester	0.001µF	50V
C17	ECCF1H270JC	Ceramic	27PF	50V
C18	ECCF1H560JC	Ceramic	56PF	50V
C19	ECCF1H220JC	Ceramic	22PF	50V
C20	ECEA1CS330	Electrolytic	33µF	16V
C21	ECQM1H393KZ	Polyester	0.039µF	50V
C22	ECCF1H270JC	Ceramic	27PF	50V
C23	ECCF1H101JC	Ceramic	100PF	50V
C24	ECCF1H270JC	Ceramic	27PF	50V
C25	ECCF1H101JC	Ceramic	100PF	50V
C26	ECQM1H103KZ	Polyester	0.01µF	50V
C27	ECQM1H333KZ	Polyester	0.033µF	50V
C28	ECCF1H330JC	Ceramic	33PF	50V
C29	ECQM1H333KZ	Polyester	0.033µF	50V
C30	ECQM1H223KZ	Polyester	0.022µF	50V
C31	ECQM1H333KZ	Polyester	0.033µF	50V
C32	ECCF1H680JC	Ceramic	68PF	50V
C33	ECCF1H220JC	Ceramic	22PF	50V
C34	ECCF1H151JC	Ceramic	150PF	50V
C35	ECCF1H820JC	Ceramic	82PF	50V
C36	ECCF1H330JC	Ceramic	33PF	50V
C37	ECQM1H103KZ	Polyester	0.01µF	50V
C38	ECEA1CS100	Electrolytic	10µF	16V
C40	ECCF1H330JC	Ceramic	33PF	50V
C41	ECCF1H470JC	Ceramic	47PF	50V
C42	ECQM1H103KZ	Polyester	0.01µF	50V
C43	ECQM1H333KZ	Polyester	0.033µF	50V
C44	ECCF1H820JC	Ceramic	82PF	50V
C45	ECEA1CS100	Electrolytic	10µF	16V
C46,47	ECQM1H152KZ	Polyester	0.0015µF	50V
C48,49	ECEA1CS100	Electrolytic	10µF	16V
C50	ECQM1H333KZ	Polyester	0.033µF	50V
C51	ECCF1H820JC	Ceramic	82PF	50V
C52	ECEA1CS100	Electrolytic	10µF	16V
C61	ECEA1CS101	Electrolytic	100µF	16V
C62,63	ECSF16E47	Tantalum	47µF	16V
C64	ECQM1H104KZ	Polyester	0.1µF	50V

SYMBOL NO.	PART NO.	DESCRIPTION		
C65	ECQM1H103KZ	Polyester	0.01μF	50V
C66,67	ECSF16E47	Tantalum	47μF	16V
C68	ECEA1CS101	Electrolytic	100PF	16V
C69	ECQM1H104KZ	Polyester	0.1μF	50V
C70	ECSF16E47	Tantalum	47μF	16V
L1	YWLS-7560J	Inductance	56μH	
L2	YWLS-7150J	Inductance	15μH	
L3	YWLS-7331J	Inductance	330μH	
L4	YWLS-7100J	Inductance	10μH	
L5	YWLS-76R8J	Inductance	6.8μH	
L6	YWENPHASE	Inductance		
L7, 8	YWLS7150J	Inductance	15μH	
CN-1	YWLJ145-1A	Inter Com Jack		
M39	*YWJ5500AM07	Fastening Bracket for Switch		

YWJ5500EZK09
[Sync Circuit Board]

SYMBOL NO.	PART NO.	DESCRIPTION		
PCB 9	*YWJ5500EZK09	Printer Circuit Board Assembly		
IC1	YWHD74LS00P	Integrated Circuit		
IC2	YWHD74221P	Integrated Circuit		
IC3	YWHD74LS221P	Integrated Circuit		
IC4	YHSFS-7805M	Integrated Circuit		
IC5	YWHD74LS221P	Integrated Circuit		
IC6	MN6065	Integrated Circuit		
IC7	YWHD74221P	Integrated Circuit		
IC8	YW-MC4044P	Integrated Circuit		
IC9	YW-MC4024P	Integrated Circuit		
Q1	2SC828-RS	Transistor		
Q2	2SA564-RS	Transistor		
Q3, 4	2SC1047-CD	Transistor		
Q5	2SA564-RS	Transistor		
Q6	2SC828-RS	Transistor		
Q7, 8	2SA564-RS	Transistor		
Q9~11	2SC828-RS	Transistor		
Q12	2SA564-RS	Transistor		
Q13	2SC828-RS	Transistor		
Q14	2SA564-RS	Transistor		
Q15	2SC1047-CD	Transistor		
Q16	2SC828-RS	Transistor		
Q17	2SA720-RS	Transistor		
Q18	2SC1318-RS	Transistor		
Q19	2SA720-RS	Transistor		
Q20	2SC1047-CD	Transistor		
Q21	2SC1318-RS	Transistor		
Q22	2SA720-RS	Transistor		
Q23	2SC1047-CD	Transistor		
Q24	2SC1318-RS	Transistor		
Q25	2SA720-RS	Transistor		
Q26	2SC1047-CD	Transistor		
Q27	2SC1318-RS	Transistor		
Q28	2SA720-RS	Transistor		
Q29	2SC1047-CD	Transistor		
Q30	2SC1318-RS	Transistor		
Q31	2SA720-RS	Transistor		
Q32	2SC1047-CD	Transistor		
Q33	2SC1318-RS	Transistor		
Q34	2SA720-RS	Transistor		
Q35	2SC1047-CD	Transistor		
Q36,37	2SC828-RS	Transistor		
Q38	2SA564-RS	Transistor		
D1	MA162	Diode		
D2	OA90	Diode		
D3	YUD1S2139C	Diode		
D4	MA162	Diode		
X1	YWHC6U2R5M	Crystal	2.5MHz	
X2	YWHC18U8R8M	Crystal	8.8MHz	
R1, 2	ERD25FJ223	Carbon	22KΩ	¼W
R3	ERD25FJ101	Carbon	100Ω	¼W
R4	ERD25FJ821	CArbon	820Ω	¼W
R5	ERD25FJ271	Carbon	270Ω	¼W
R6	ERD25FJ153	Carbon	15KΩ	¼W
R7	ERD25FJ823	Carbon	82KΩ	¼W
R8	ERD25FJ122	Carbon	1.2KΩ	¼W
R9	ERD25FJ101	Carbon	100Ω	¼W
R10	ERD25FJ562	Carbon	5.6KΩ	¼W
R11	ERD25FJ122	Carbon	1.2KΩ	¼W
R12	ERD25FJ102	Carbon	1KΩ	¼W
R13	ERD25FJ471	Carbon	470Ω	¼W
R14	ERD25FJ123	Carbon	12KΩ	¼W
R15	ERD25FJ122	Carbon	1.2KΩ	¼W
R16	ERD25FJ471	Carbon	470Ω	¼W
R17	ERD25FJ102	Carbon	1KΩ	¼W
R18	ERD25FJ333	Carbon	33KΩ	¼W
R19	ERD25FJ223	Carbon	22KΩ	¼W
R20	ERD25FJ681	Carbon	680Ω	¼W
R21	ERD25FJ122	Carbon	1.2KΩ	¼W
R22	ERD25FJ561	Carbon	560Ω	¼W
R23	ERD25FJ272	Carbon	2.7KΩ	¼W
R24	ERD25FJ563	Carbon	56KΩ	¼W
R25	ERD25FJ102	Carbon	1KΩ	¼W
R26	ERD25FJ272	Carbon	2.7KΩ	¼W
R27	ERD25FJ222	Carbon	2.2KΩ	¼W
R28	ERD25FJ102	Carbon	1KΩ	¼W
R29	ERD25FJ562	Carbon	5.6KΩ	¼W
R30	ERD25FJ222	Carbon	2.2KΩ	¼W
R31	ERD25FJ272	Carbon	2.7KΩ	¼W
R32	ERD25FJ181	Carbon	180Ω	¼W
R33	ERD25FJ392	Carbon	3.9KΩ	¼W
R34	ERD25FJ122	Carbon	1.2KΩ	¼W

SYM-BOL NO.	PART NO.	DESCRIPTION			SYM-BOL NO.	PART NO.	DESCRIPTION		
R35	ERO25CKF1002	Metal	10KΩ	¼W					
R36	ERO25CKF1202	Metal	12KΩ	¼W	R93	ERD25FJ561	Carbon	560Ω	¼W
R37	ERO25CKF1002	Metal	10KΩ	¼W	R94	ERD25FJ562	Carbon	5.6KΩ	¼W
R39	ERG1ANJ330	Metal	33Ω	1W	R95	ERD25FJ272	Carbon	2.7KΩ	¼W
R40	ERD25FJ561	Carbon	560Ω	¼W	R96,97	ERD25FJ100	Carbon	10Ω	¼W
R41	ERD25FJ102	Carbon	1KΩ	¼W	R98	ERD25FJ560	Carbon	56Ω	¼W
R42	ERO25CKF3902	Metal	39KΩ	¼W	R99	ERD25FJ561	Carbon	560Ω	¼W
R43	ERO25CKF4701	Metal	4.7KΩ	¼W	R100	ERD25FJ562	Carbon	5.6KΩ	¼W
R44	ERO25CKF8201	Metal	8.2KΩ	¼W	R101	ERD25FJ272	Carbon	2.7KΩ	¼W
R45	ERD25FJ562	Carbon	5.6KΩ	¼W	R102,103	ERD25FJ100	Carbon	10Ω	¼W
R46	ERD25FJ272	Carbon	2.7KΩ	¼W	R104	ERD25FJ560	Carbon	56Ω	¼W
R47	ERD25FJ152	Carbon	1.5KΩ	¼W	R105	ERD25FJ561	Carbon	560Ω	¼W
R48,49	ERD25FJ472	Carbon	4.7KΩ	¼W	R106	ERD25FJ562	Carbon	5.6KΩ	¼W
R50,51	ERD25FJ123	Carbon	12KΩ	¼W	R107	ERD25FJ272	Carbon	2.7KΩ	¼W
R52	ERD25FJ101	Carbon	100Ω	¼W	R108,109	ERD25FJ472	Carbon	4.7KΩ	¼W
R53	ERD25FJ152	Carbon	1.5KΩ	¼W	R110	ERD25FJ272	Carbon	2.7KΩ	¼W
R54	ERD25FJ102	Carbon	1KΩ	¼W	R111	ERD25FJ102	Carbon	1KΩ	¼W
R55	ERD25FJ333	Carbon	33KΩ	¼W	R112	ERD25FJ821	Carbon	820Ω	¼W
R56	ERD25FJ104	Carbon	100KΩ	¼W	R113	ERD25FJ122	Carbon	1.2KΩ	¼W
R57	ERD25FJ102	Carbon	1KΩ	¼W	R114	ERD25FJ222	Carbon	2.2KΩ	¼W
R58	ERD25FJ153	Carbon	15KΩ	¼W	R115	ERD25FJ103	Carbon	10KΩ	¼W
R59	ERD25FJ222	Carbon	2.2KΩ	¼W	VR1	YCVRJ6PK502B	Variable Resistor	5KΩ	
R60	ERD25FJ102	Carbon	1KΩ	¼W	VR2	YCVRJ6PK103B	Variable Resistor	10KΩ	
R61	ERD25FJ822	Carbon	8.2KΩ	¼W	VR3	EWKE1AS15A23	Variable Resistor	2KΩ	
R62	ERD25FJ821	Carbon	820Ω	¼W	VR4	WHS512A470B	Variable Resistor	470Ω	
R63	ERD25FJ152	Carbon	1.5KΩ	¼W	C1	ECEA16N33U	Electrolytic	33μF	16V
R64	ERD25FJ222	Carbon	2.2KΩ	¼W	C2	ECEA1AS470	Electrolytic	47μF	10V
R65	ERD25FJ272	Carbon	2.7KΩ	¼W	C3, 4	ECEA1CS100	Electrolytic	10μF	16V
R66	ERD25FJ103	Carbon	10KΩ	¼W	C5	ECQM1H103KZ	Polyester	0.01μF	50V
R67	ERD25FJ152	Carbon	1.5KΩ	¼W	C6	ECEA1AS101	Electrolytic	100μF	10V
R68	ERD25CKF5601	Metal	5.6KΩ	¼W	C7	ECEA1ES4R7	Electrolytic	4.7μF	25V
R69	ERO25CKF8201	Metal	8.2KΩ	¼W	C8	ECCF1H470JC	Ceramic	47PF	50V
R70	ERD25FJ332	Carbon	3.3KΩ	¼W	C9	ECCF1H151JC	Ceramic	150PF	50V
R71	ERD25FJ681	Carbon	680Ω	¼W	C10	ECQM1H103KZ	Polyester	0.01μF	50V
R72,73	ERD25FJ100	Carbon	10Ω	¼W	C11	ECCF1H820JC	Ceramic	82PF	50V
R74	ERD25FJ560	Carbon	56Ω	¼W	C12	ECEA1CS100	Electrolytic	10μF	16V
R75	ERD25FJ561	Carbon	560Ω	¼W	C13	ECQM1H393KZ	Polyester	0.039μF	50V
R76	ERD25FJ562	Carbon	5.6KΩ	¼W	C14,15	ECQM1H333KZ	Polyester	0.033μF	50V
R77	ERD25FJ272	Carbon	2.7KΩ	¼W	C16	ECCF1H101JC	Ceramic	100PF	50V
R78,79	ERD25FJ100	Carbon	10Ω	¼W	C19	ECCF1H470JC	Ceramic	47PF	50V
R80	ERD25FJ560	Carbon	56Ω	¼W	C20	ECEA1AS221	Electrolytic	220μF	10V
R81	ERD25FJ561	Carbon	560Ω	¼W	C21	ECCF1H820JC	Ceramic	82PF	50V
R82	ERD25FJ562	Carbon	5.6KΩ	¼W	C22	ECCF1H100DC	Ceramic	10PF	50V
R83	ERD25FJ272	Carbon	2.7KΩ	¼W	C23	ECCF1H101JC	Ceramic	100PF	50V
R84,85	ERD25FJ100	Carbon	10Ω	¼W	C24	ECQS1182JZ	Styrol	1800PF	100V
R86	ERD25FJ560	Carbon	56Ω	¼W	C25	ECQS1122JZ	Styrol	1200PF	100V
R87	ERD25FJ561	Carbon	560Ω	¼W	C26	ECQS1821JZ	Styrol	820PF	100V
R88	ERD25FJ562	Carbon	5.6KΩ	¼W	C27	ECEA1CS100	Electrolytic	10μF	16V
R89	ERD25FJ272	Carbon	2.7KΩ	¼W	C28	ECQM1H103KZ	Polyester	0.01μF	50V
R90,91	ERD25FJ100	Carbon	10Ω	¼W	C29	ECEA1CS470	Electrolytic	47μF	16V
R92	ERD25FJ560	Carbon	56Ω	¼W	C30	ECQM1H102KZ	Polyester	0.001μF	50V

SYMBOL NO.	PART NO.	DESCRIPTION
C31	ECCF1H680JC	Ceramic 68PF 50V
C32	ECQM1H103KZ	Polyester 0.01µF 50V
C33	ECCF1H560JC	Ceramic 56PF 50V
C34	ECCF1H101JC	Ceramic 100PF 50V
C35	ECQS1122JZ	Styrol 1200PF 100V
C36	ECQS1821JZ	Styrol 820PF 100V
C40,41	ECEA1CS101	Electrolytic 100µF 16V
C42	ECEA1ES470	Electrolytic 47µF 25V
C43	ECCF1H560JC	Ceramic 56PF 50V
C44	ECEA1ES470	Electrolytic 47µF 25V
C45	ECCF1H560JC	Ceramic 56PF 50V
C46	ECEA1ES470	Electrolytic 47µF 25V
C47	ECCF1H560JC	Ceramic 56PF 50V
C48	ECEA1ES470	Electrolytic 47µF 25V
C49	ECCF1H560JC	Ceramic 56PF 50V
C50	ECEA1ES470	Electrolytic 47µF 25V
C51	ECCF1H560JC	Ceramic 56PF 50V
C52	ECEA1ES470	Electrolytic 47µF 25V
C53	ECCF1H560JC	Ceramic 56PF 50V
C54	ECEA50N1	Electrolytic 1µF 50V
C55	ECQM1H473KZ	Polyester 0.047µF 50V
C57	ECCF1H101JC	Ceramic 100PF 50V
C60	ECEA1CS101	Electrolytic 100µF 16V
C61~63	ECSF16E47	Tantalum 47µF 16V
C64	ECEA1CS221	Electrolytic 220µF 16V
C65	ECEA1CS101	Electrolytic 100µF 16V
L1, 2	YWLS-7150J	Inductor 15µH
L3	YSP0406L4R7K	Inductor 4.7µH
VC1,2	ECV1ZW50X32	Trimmer Capacitor 50PF
VC3	ELV1ZW25X53N	Trimmer Capacitor 25PF
M37	YWV8310HM02	Handle

YWJ5500ZK10
[Cut - Sup Selector Switch Board]

PCB10	*YWJ5500ZK10	Printed Circuit Board Assembly
TR1	2SA564-RS	Transistor
R1	ERD18TJ103	Carbon 10KΩ ⅛W
R2	ERD18TJ563	Carbon 56KΩ ⅛W
VR1	YWSR29D2.2KB	Variable Resistor 2.2KΩ
C1,2	ECEB1ES4R7	Electrolytic 4.7µF 25V
SW1, 2	YW2FL1EC0420	Cut Sup Selector Switch
PL1, 2	YW6200120500	Lamp (x 2)

YWJ5500EZK11
[Mother Board]

SYMBOL NO.	PART NO.	DESCRIPTION
PCB11	*YWJ5500EZK11	Printed Circuit Board Assembly
IC1, 2	YHSFS-7812M	Integrated Circuit
TR1	2SA699A-PQ	Transistor
D1	YUSMB-01	Diode
D2, 3	YUDRA-1	Diode
R1, 2	ERD18TJ470	Carbon 47Ω ⅛W
R3	ERD14TJ561	Carbon 560Ω ¼W
R4	ERD18TJ102	Carbon 1KΩ ⅛W
R5	ERD18TJ122	Carbon 1.2KΩ ⅛W
R6	ERD25FJ104	Carbon 100KΩ ¼W
R7	ERD25FJ562	Carbon 5.6KΩ ¼W
R8	ERD25FJ472	Carbon 4.7KΩ ¼W
C1	ECET25R103S	Electrolytic 10000µF 25V
C2	ECEA1HSR33	Electrolytic 0.33µF 50V
C3	ECEA1CS331	Electrolytic 330µF 16V
C4	ECET25R332SU	Electrolytic 3300µF 25V
C5	ECEA1HSR33	Electrolytic 0.33µF 50V
C6	ECEA1CS331	Electrolytic 330µF 16V
C7	ECEA1AS102	Electrolytic 1000µF 10V
T1	YWDP42-6015	Choke Coil for Intercom
CN1-J	YWJ5136-6A	6-Pin Jack-Male
CN2-J~ CN4-J	YW5134-10C	10-Pin Jack-Male
CN5-J CN6-J	YWJ5136-6A	6-Pin Jack-Male
CN7-J	YW5134-10C	10-Pin Jack-Male
CN8-J~ CN19-J	YWR412238U	22-Pin Jack-Female
M35	*YWJ5500AM03	Support Bracket for Mother Board

YWJ5500EZK12
[Connection Board]

PCB12	*YWJ5500EZK12	Printed Circuit Board Assembly
TR1~21	2SC828-RS	Transistor
TR24	2SC1317-RS	Transistor
R1	ERD18TJ750	Carbon 75Ω ⅛W
R2, 3	ERD18TJ183	Carbon 18KΩ ⅛W
R4	ERD18TJ221	Carbon 220Ω ⅛W
R5	ERD18TJ152	Carbon 1.5KΩ ⅛W
R6	ERD18TJ750	Carbon 75Ω ⅛W
R7, 8	ERD18TJ183	Carbon 18KΩ ⅛W
R9	ERD18TJ221	Carbon 220Ω ⅛W
R10	ERD18TJ152	Carbon 1.5KΩ ⅛W
R11	ERD18TJ750	Carbon 75Ω ⅛W
R12,13	ERD18TJ183	Carbon 18KΩ ⅛W

SYMBOL NO.	PART NO.	DESCRIPTION
R14	ERD18TJ221	Carbon 220Ω ⅛W
R15	ERD18TJ152	Carbon 1.5KΩ ⅛W
R16	ERD18TJ750	Carbon 75Ω ⅛W
R17,18	ERD18TJ183	Carbon 18KΩ ⅛W
R19	ERD18TJ221	Carbon 220Ω ⅛W
R20	ERD18TJ152	Carbon 1.5KΩ ⅛W
R21	ERD18TJ750	Carbon 75Ω ⅛W
R22,23	ERD18TJ183	Carbon 18KΩ ⅛W
R24	ERD18TJ221	Carbon 220Ω ⅛W
R25	ERD18TJ152	Carbon 1.5KΩ ⅛W
R26	ERD18TJ750	Carbon 75Ω ⅛W
R27,28	ERD18TJ183	Carbon 18KΩ ⅛W
R29	ERD18TJ221	Carbon 220Ω ⅛W
R30	ERD18TJ152	Carbon 1.5KΩ ⅛W
R31	ERD18TJ750	Carbon 75Ω ⅛W
R32,33	ERD18TJ183	Carbon 18KΩ ⅛W
R34	ERD18TJ221	Carbon 220Ω ⅛W
R35	ERD18TJ152	Carbon 1.5KΩ ⅛W
R36	ERD18TJ750	Carbon 75Ω ⅛W
R37,38	ERD18TJ183	Carbon 18KΩ ⅛W
R39	ERD18TJ221	Carbon 220Ω ⅛W
R40	ERD18TJ152	Carbon 1.5KΩ ⅛W
R41	ERD18TJ750	Carbon 75Ω ⅛W
R42,43	ERD18TJ183	Carbon 18KΩ ⅛W
R44	ERD18TJ221	Carbon 220Ω ⅛W
R45	ERD18TJ152	Carbon 1.5KΩ ⅛W
R46	ERD18TJ750	Carbon 75Ω ⅛W
R47,48	ERD18TJ183	Carbon 18KΩ ⅛W
R49	ERD18TJ221	Carbon 220Ω ⅛W
R50	ERD18TJ152	Carbon 1.5KΩ ⅛W
R51	ERD18TJ750	Carbon 75Ω ⅛W
R52,53	ERD18TJ183	Carbon 18KΩ ⅛W
R54	ERD18TJ221	Carbon 220Ω ⅛W
R55	ERD18TJ152	Carbon 1.5KΩ ⅛W
R61	ERD18TJ103	Carbon 10KΩ ⅛W
R62	ERD18TJ104	Carbon 100KΩ ⅛W
R63	ERD18TJ103	Carbon 10KΩ ⅛W
R64	ERD18TJ104	Carbon 100KΩ ⅛W
R65	ERD18TJ103	Carbon 10KΩ ⅛W
R66	ERD18TJ104	Carbon 100KΩ ⅛W
R67	ERD18TJ103	Carbon 10KΩ ⅛W
R68	ERD18TJ104	Carbon 100KΩ ⅛W
R69	ERD18TJ103	Carbon 10KΩ ⅛W
R70	ERD18TJ104	Carbon 100KΩ ⅛W
R71	ERD18TJ103	Carbon 10KΩ ⅛W
R72	ERD18TJ104	Carbon 100KΩ ⅛W
R73	ERD18TJ103	Carbon 10KΩ ⅛W
R74	ERD18TJ104	Carbon 100KΩ ⅛W
R75	ERD18TJ103	Carbon 10KΩ ⅛W
R76	ERD18TJ104	Carbon 100KΩ ⅛W

SYMBOL NO.	PART NO.	DESCRIPTION
R77	ERD18TJ103	Carbon 10KΩ ⅛W
R78	ERD18TJ104	Carbon 100KΩ ⅛W
R79	ERD18TJ103	Carbon 10KΩ ⅛W
R80	ERD18TJ104	Carbon 100KΩ ⅛W
R81~84	ERD18TJ750	Carbon 75Ω ⅛W
R85~90	ERD18TJ680	Carbon 68Ω ⅛W
R91	ERD25FJ122	Carbon 1.2KΩ ¼W
R92	ERD25FJ222	Carbon 2.2KΩ ¼W
R93	ERD25FJ152	Carbon 1.5KΩ ¼W
R94	ERD25FJ561	Carbon 560Ω ¼W
R95	ERD25FJ222	Carbon 2.2KΩ ¼W
R96	ERD25FJ680	Carbon 68Ω ¼W
R97	ERD25FJ102	Carbon 1KΩ ¼W
R98	ERD25FJ680	Carbon 68Ω ¼W
C1~11	ECEB1AS470	Electrolytic 47μF 10V
C13,14	ECEB1CS100	Electrolytic 10μF 16V
C16	ECEBOJS101	Electrolytic 100μF 6.3V
E1	YVL437TM027	Wind Pin (x52)
SW1~11	*YWSSC-322A	75Ω Terminal Switch
CN2-J~ CN4-J	YW5145-10CH	10-Pin Plug-Female
CN5-J, CN6-J	YW5145-6CH	6-Pin Plug-Female
CN7-J	YW5145-10CH	10-Pin Plug Female

YWJ5500ZK13
[Extention Board]

PCB13	*YWJ5500ZK13	Printed Circuit Board Assembly
CN10	YWRS44-24T2G	22-Pin Connector
M26	*YWJ5500PUR1	Caution Lavel for Extention Circuit

ACCESSORY PARTS

PCB13	*YWJ5500ZK13	Extention Board
E1~10	YQAAA-33	4-Pin Plug-Female
PL1,2	YW6200120500	Lamp (x2)
M40	*YWJ5500ERB1 *YWJ5500NRB1	Instruction Book for WJ-5500E Instruction Book for WJ-5500N
M41	YQA0052	Warranty Card
M42	YWV22XPRB99A	Servicenter Directory
M43	*YWJ5500UR02	Switch Card (x32)
M44	YWT15X20C03	Polyethylene Bag for Circuit Board
M45	XZB25X40C05	Polyethylene Bag for Printed Matter
M46	YWT050803	Polyethylene Bag for Switch and Lamp
M47	YWT10X10C03	Polyethylene Bag for 4-Pin Connecto

PACKAGING PARTS

M50	*YWJ5500EPB1 *YWJ5500NPB1	Package Case for WJ-5500E/B, E/G Package Case for WJ-5500N/NA
M51	XZB55X71C10	Polyethylene Bag for Set